

19970621.qrp qrp-por0.763
 >From owner-qrp-l@lehigh.edu Fri Jun 20 18:07 CDT 1997
 >Received: from sco.theporch.com (sco.theporch.com [207.234.31.38])
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 > for <shimshon@uro.theporch.com>; Fri, 20 Jun 1997 18:07:07 -0500 (CDT)
 >Received: from fidoii.CC.lehigh.EDU (fidoii.CC.lehigh.EDU [128.180.1.4])
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 <35046-45168>; Fri, 20 Jun 1997 19:03:23 -0400
 >Date: Fri, 20 Jun 1997 19:03:20 EDT
 >Sender: owner-qrp-l@lehigh.edu
 >Precedence: bulk
 >From: qrp-l@lehigh.edu
 >To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
 >Subject: QRP-L digest 763
 >Mime-Version: 1.0
 >Content-Type: text/plain; charset=us-ascii
 >X-Listprocessor-Version: 8.1 beta -- ListProcessor(tm) by CREN
 >Message-Id: <97Jun20.190323edt.35046-45168+222@fidoii.cc.Lehigh.EDU>
 >Status: 0

QRP-L Digest 763

Topics covered in this issue include:

- 1) [21627] SST 40M de K5FO
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 2) [21628] Needed: Autek QF-1 manual
by "Wilford D. Lindsey" <70511.3041@CompuServe.COM>
- 3) [21629] Antennas from the BARK PBBS: Loops
by wb2vuo@juno.com (William K Hibbert)
- 4) [21630] Re: Antennas from the BARK PBBS: Loops
by Bob Hightower <ki7mn@dancris.com>
- 5) [21631] Mouse as Paddle?
by fmathews@norfolk.infi.net (Frank Matthews)
- 6) [21632] Re: Advice on a pi-net
by dwink@juno.com (Daniel C Winkler)
- 7) [21633] Re: Mouse as Paddle?
by Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
- 8) [21634] QST Article--Voltage Booster
by DYARNES@aol.com
- 9) [21635] Ellen's NW20 - Report
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 10) [21636] HP 200CD Audio Oscillator - Free
by "Adam B. Kanis" <adam-kanis@uiowa.edu>
- 11) [21637] The MFJ-451 Keyboard Saga Continues
by kd7s@psnw.com (Bill Jones)

- 12) [21638] Re: Sierra AGC, toroids & SWR query
by Jess Gypin <jessqrp@concentric.net>
- 13) [21639] Re: Mouse as Paddle?
by TonyDrumm@ibm.net (Tony Drumm)
- 14) [21640] For sale: MFJ-971 QRP tuner
by Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
- 15) [21641] CQ Mag. July 1997
by n4so@juno.com
- 16) [21642] Juno crashes
by n4so@juno.com
- 17) [21643] FS: Some QRP stuff, some other goodies
by Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
- 18) [21644] SST 40M de K5FO Mod #1
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 19) [21645] loop skywires
by Bob Hirsch <bobh@p3.net>
- 20) [21646] SST 40M de K5FO on the air
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 21) [21647] E-mail request: to my home address only, please (N6KR)
by svecbrdk@well.com (L.Svec,W.Burdick)
- 22) [21648] NW QRP Club FD Plans
by Bill Todd <bill@techline.com>
- 23) [21649] ZF8 DXpedition Announcement
by Bob Patten <n4bp@shadow.net>
- 24) [21650] FOR SALE: OMNI-A, BC-560XLT SCANNER
by Dana Michael <damichael@amp.com>
- 25) [21651] Re: Mouse as Paddle?
by kd7s@psnw.com (Bill Jones)
- 26) [21652] Make A Contact!
by fmathews@norfolk.infi.net (Frank Matthews)
- 27) [21653] NF3I/7 @ Ft. Tuthill!
by Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
- 28) [21654] KD1JV Spectrum Analyzer 'Scope Adapter (SA/SA) for sale
by "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>
- 29) [21655] NorCal 40a (rev a) in progress
by John Evans - N3Q00 <jaevans@codenet.net>
- 30) [21656] NorCal 40, the original....
by Monte Stark <ku7y@sage.dri.edu>
- 31) [21657] Thanks to all who answered Envriotronics VS Vibrokey, got
by James Griffith <GriffithJ@ricks.edu>
- 32) [21658] Re: NorCal 40, the original....
by Randy Hargenrader <randyh@harksystems.com>
- 33) [21659] Re: NorCal 40, the original....
by John Evans - N3Q00 <jaevans@codenet.net>
- 34) [21660] Spelling error in post---HOW PICKY!!!@!!
by Dennis Zeares K3ETS <wzeares@post.cis.smu.edu>
- 35) [21661] FS: Emtech NW40 : is sold
by "Allan G. Taylor" <ataylor@midas.llnl.gov>

- 36) [21662] HP8640B Sig Gen Opportunity
by Ed Tanton <n4xy@bellsouth.net>
- 37) [21663] Re: NF3I/7 @ Ft. Tuthill!
by "Mark E. Monninger" <markem@primenet.com>
- 38) [21664] Argo 515 selectivity improvement
by Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>
- 39) [21665] FS: SIERRA KIT
by Ronald_A_Pfeiffer@ccmail.ed.ray.com
- 40) [21666] Headsup SS 97 Note
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 41) [21667] SST 30M de N3XRV (Q's and Observations - LONG)
by Chris Cartwright <ccart@dns.vidtel.com>
- 42) [21668] "Graph" maker???
- by Sandy W5TVW <ebjr@worldnet.att.net>
- 43) [21669] VFO Drift (i.e. Centenial 75m)
by FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \((608\)) 267-3135)
- 44) [21670] RX-10. PM-2 Manuals Recieved.
by w8lrm@juno.com (Albert K. Rea)
- 45) [21671] OHR100/30 For Sale or Trade
by Ed Pacyna <pacyna@auratek.com>
- 46) [21672] Re: Headsup SS 97 Note
by Roger Hightower <n7kt@dancris.com>
- 47) [21673] Re: SST 30M de N3XRV (Q's and Observations - LONG)
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 48) [21674] "Rainbow" tuner on 80 ????
- by Stan Skelton <sskelton@cln.etc.bc.ca>
- 49) [21675] No Joy on the webpage today
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 50) [21676] Re: Headsup SS 97 Note
by Stan <stan@cruzio.com>
- 51) [21677] CAD program for panel design?
by SNickrand@aol.com
- 52) [21678] Re: Headsup SS 97 Note
by "Taylor Greg" <gtaylor@TAEX003N.tamu.edu>
- 53) [21679] 50/40/30 CA Results/Story
by Ed Loranger <we6w@qsl.net>
- 54) [21680] Re: 50/40/30 CA Results/Story
by Ed Loranger <we6w@qsl.net>
- 55) [21681] Re: Headsup SS 97 Note
by "Taylor Greg" <gtaylor@taex003n.tamu.edu>
- 56) [21682] Re: Headsup SS 97 Note
by Monte Stark <ku7y@sage.dri.edu>
- 57) [21683] Keyer
by "Robert L. Willsey" <w4nul@cowboy.brightok.net>
- 58) [21684] Re: Headsup SS 97 Note
by Roger Hightower <n7kt@dancris.com>
- 59) [21685] Re: Headsup SS 97 Note
by Pete Hardie <hardie@duke.usask.ca>

- 60) [21686] SS Sections
by "Jim (AL7FS) and Nancy (KL7NY) Larsen" <larsennc@alaska.net>
- 61) [21687] DSP Blaster
by "Jim (AL7FS) and Nancy (KL7NY) Larsen" <larsennc@alaska.net>
- 62) [21688] Section counts for SS97
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 63) [21689] Re: "Graph" maker???
by Chris Trask <ctrask@primenet.com>
- 64) [21690] Re: SS Sections
by Bob Patten <n4bp@shadow.net>
- 65) [21691] PV80NU ??
by Barry Keating <Barry.P.Keating.1@nd.edu>
- 66) [21692] New Canadian Sections
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 67) [21693] Dipole VS Phased Verticals
by Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
- 68) [21694] "Plotting" programs...
by Sandy W5TVW <ebjr@worldnet.att.net>
- 69) [21695] Re: Headsup SS 97 Note
by Richard Mulvey <mulveyr@frontiernet.net>
- 70) [21696] France DXpedition all ready to go!
by David Adams <adamsclan@netgate.net>
- 71) [21697] Re: Headsup SS 97 Note
by Joe Gervais <vole@primenet.com>
- 72) [21698] BARK Files causing Juno Crash?
by wb2vuo@juno.com (William K Hibbert)
- 73) [21699] Antenna Files from the BARK PBBS: G5RV's
by wb2vuo@juno.com (William K Hibbert)

Date: Thu, 19 Jun 1997 06:17:45 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [21627] SST 40M de K5F0
Message-ID: <199706190517.GAA02717@chuck.dallas.sgi.com>

Well, I forgot which band I ordered first at Dayton and yes it was the 40m one. Arrived in the mail when I stopped at the PO on the way home.

2.5 hours to build (don't do this at home, remember I had experience on one already :-))

Came up first time. Web pics on Friday.

1. Agree with Paul, the offset is way too low. Around 390Hz sounds about right by my ear and is what Paul measured. Gotta move it up.
2. At high volume and when a signal comes in, the audio section goes into serious oscillation. Too much feedback somewhere and I'll get the scope out. I seem to be getting a ringing effect at the other volumes also, so it's the same problem evidently.

I used the smaller tuning range and get 7.038 to 7.045MHz. FB by me.

More measurements to follow with the web info.

OK, clear the desk. Next?

I substituted the Murata caps (orange) for the ones supplied and got a perfect fit. So if you happen to have some in the supply cabinet I recommend them out of the box.

Listening on the NC40a I seem to detect a slight chirp. Keying not as harsh as some have reported.

Film at 11 from TX.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: 19 Jun 97 19:25:37 EDT

From: "Wilford D. Lindsey" <70511.3041@CompuServe.COM>

To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "W.D. (Doc) Lindsey/K0EVZ" <70511.3041@CompuServe.COM>

Subject: [21628] Needed: Autek QF-1 manual

Message-ID: <970619232537_70511.3041_IHD55-2@CompuServe.COM>

Gang:

Need whatever documentation is available for the Autek QF-1 notch filter. Will gladly reimburse for costs. Can anyone help out? Thanks in advance.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 mn-qrp 19 nj-qrp 69 ak/qrp 139

ARCI 9398 ARRL WAS 49/38 DXCC 43/38 <><

Sierra Argosy 525 Argo 515 HW-9 Explorer II-30 Norcal 40a SW-30
TT 1340 A&A Gary Breed 30 49er 38S Schurr Paddles MFJ 259
MFJ 941D TNT/2 Windom SLV/W6MMA Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Thu, 19 Jun 1997 19:52:24 EDT
From: wb2vuo@juno.com (William K Hibbert)
To: qrp-l@Lehigh.EDU
Subject: [21629] Antennas from the BARK PBBS: Loops
Message-ID: <19970619.195126.2063.5.wb2vuo@juno.com>

WOW! A lot of requests on the files! Bob, KI7MN is posting them on his site, and I will send one group of the files per day, this so as to not tie up the list too much.

Here's the loops...Keith,

WB2VUO-----<6rca_lup.txt>-----After
reading Cecil, W6RCA's post on the triangular loop for 40 Meters, I decided to play with the design on other bands. First off, the design, fed at a bottom corner, should look more vertical than horizontal, so I scaled one for the 2 Meter band to check out this premise. The vertical side came out to 11.75", the flat top to 34.75" and the diagonal to 36.5", total length of 83". Resonance showed up at about 144.5 MHz, within reason allowing for the relatively 'large' conductor size (#12 solid wire). Now for the checks. I tie-wrapped the flat top to a 3/8" fiberglass electric fence post, which was forced into a hole in a 60" length of 1" CPVC pipe. The feedpoint was attached to a small rectangle of perfboard, held off the PVC with a 6" length of the 3/8" fiberglass. First off, I rotated the CPVC mast for a pattern check, utilizing the local repeater (K2SA/R), and found a clean bi-directional pattern, but with asymmetrical nulls in the plane of the loop. I then put the flat top in a vertical position and swung the mast through 360-degrees. I saw no real change in the pattern, but the nulls were more symmetrical. The signals were, for all practical purposes, the same. It seems, from this rough test, that the actual polarization is oblique, between vertical and horizontal. This may be an anomaly caused by coupling to objects in the near field, and I really don't have the means of eliminating this possibility. However, regardless of the "true" polarization, the signals were equal to my Copper-Tube J-Pole with both at an equal height (a back porch roof, up 15 feet...) I will next try this design on 6 and 10 Meter

FM. If you want to tryout a resonant, single-band version, here's the lengths, scaled from the original design...

	FREQUENCY	VERTICAL
FLAT TOP	DIAGONAL	
1.85 MHz	77 ft	226 ft
3.70 MHz	38 ft	238 ft
7.10 MHz	113 ft	20 ft
10.10 MHz	119 ft	59 ft
14.10 MHz	62 ft	41.5 ft
18.10 MHz	29.7 ft	43.5 ft
23.1 ft	14 ft	23.1 ft
24.3 ft	21.20 MHz	6.7 ft
19.8 ft	20.8 ft	24.90 MHz
5.7 ft	16.8 ft	17.7 ft
28.40 MHz	5 ft	14.8 ft
15.5 ft	29.40 MHz	4.8 ft
14.2 ft	14.9 ft	52.50 MHz
32.4 in	95.5 in	100.5 in
146.0 MHz	11.7 in	34.5 in
36 in		

I used a couple of snap-on ferrites from the local computer shop for the "Sorta-balun" on the outside of the RG-8X. I don't know if it did anything, but they were there, so I used them... It would be nice if someone could model this loop and see what the polarization actually "is"... 72/73, Keith, WB2VUO, QRP-L #582 Trustee, KB2YTW/B 10 Mtr Milli-wattting Beacon (250 mW @ 28.2870 MHz) "In the Depths of the Great Bergen

Swamp... FN13ac"-----

<EOF>-----

<looper.txt>-----

The Looper, A Delta Loop/
Diamond Loop Antenna Basically, the Looper is a full-wave loop antenna, with the full-wave referring to the circumference. One common example of this antenna can be seen by looking at a Quad. The loop elements in the are based on a full-wave loop. The Looper is basically a quad D.E. (driven element), that is fed as an antenna, sort of the same difference you would see between a dipole and a Yagi. The Quad antenna came to be in the 1940's at the HCJB transmitter site in Quito, Ecuador. The yagi antennas they were using for the high-power Shortwave broadcasts had Corona discharge from the ends, which were destroying the elements. The Full-wave loop element, with a reflector were tried, and didn't suffer from the corona damage. The Cubical Quad became popular with the Amateur community in the 1950's, although with the high wind loading, it has lost some of the popularity it had. So, why would we (or you, for instance), want to run a Looper? Well, with the closed loop. any DC on the loop is bled to the ground side of the antenna. This helps reduce precipitation static, and may be part of the reason the Looper doesn't respond to static as much as other antennas. Some antenna references claim that the Full-Wave Loop has gain over a dipole, but it has been argued both ways. One real advantage is bandwidth, and another is multi-band capabilities. If you are running a dipole, and try to use it on its second harmonic, the center feedpoint shows a very high impedance. This results in a large mismatch, requiring the use of open-wire feeders, or stubs at the feedpoint. The Looper has a feed impedance on its fundamental of around 110 ohms, and doesn't vary much from that on its harmonics. You can use open-wire to feed it, and it will have similar matching characteristics on the various harmonically-related bands. If you want to use a Looper as a single band Delta or Diamond Loop,

just feed the antenna with a quarter-wave long section of 75 Ohm coax, such as RG-59A/U. The velocity factor needs to be multiplied in for this cable length. The velocity factor for the foam cables is 0.8, so, to calculate the length, use the formula: $L = (246 \times 0.8) / F(\text{MHz})$. Utilizing the lower HF spectrum during Field Day puts an interesting perspective on our antenna requirements. We want to talk to EVERYBODY, so the closer-in contacts are as important as DX. A high angle of radiation will be to our advantage on 80 & 40 meters, and by mounting the Looper in a horizontal, or sloping position, we will have the high-angle radiation we want. On the higher bands (20, 15 & 10 Meters), we will want a lower angle of radiation. The Looper, on its harmonic bands, tends to be an end-fired, low angle, vertically polarized antenna, which will give us the "DX" we want. In this respect, we can cover all the bases with one antler.

Just to give you an idea of what we will have, or provide you with the data you would need to install a Looper at your station at home, here are the dimensions for Full-Wave Loops for frequencies from 1.8 MHz to 29.3 MHz:

Line (MHz)	Delta Side	Diamond Side	Matching RG-59A/U (Foam)
1.8	186.1'	139.6'	176.3'
2.0	132.2'	103.7'	125.6'
3.6	98.5'	93.1'	54.7'
7.1	85.9'	64.4'	47.2'
10.1	35.4'	27.7'	24.9'
14.1	19.5'	23.8'	14.0'
21.1	18.5'	13.9'	15.9'
24.9	11.9'	9.3'	10.1'
28.3	7.9'	11.8'	7.0'
29.3	11.4'	8.6'	6.7'

NOTE: If the Looper is mounted in a Vertical plane, and fed in the center of the bottom or top, the polarization is Horizontal. If the Looper is fed in the center of either side, the polarization is Vertical. In the Delta configuration, with the plane of the Looper Vertical, feeding it at either bottom corner results in an Oblique polarization, partially Vertical and partially Horizontal.

Antenna season is here, so get out the wire and coax, and go to town. Let's hear about your Looper experiences. 73, Keith, WB2VUO-----

<EOF>-----

-----<recloop.txt>-----From:

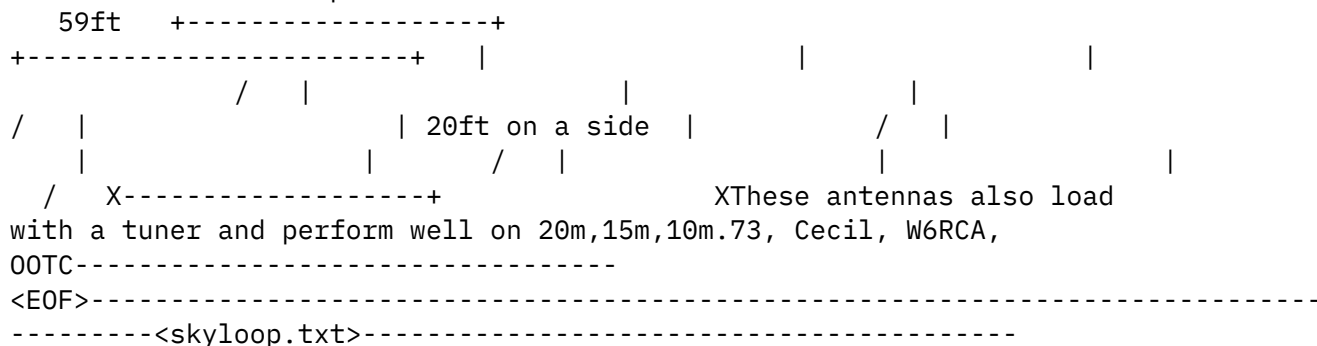
Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>To: "Low Power Amateur

Radio Discussion" <qrpl@lehigh.edu>Date: Tue, 10 Dec 96 07:54:00

PSTSubject: Re: 40-meter rectangular loop>From: "L. B. Cebik"

<cebik@utkux.utcc.utk.edu>>In use as a low angle dx antenna, there is little to choose between the mid-side feed and the bottom corner feed. Hi L.B., just a few comments based on EZNEC. EZNEC sez this rectangle fed on a side is resonant at 7.205 MHz with a feedpoint impedance of 47 ohms and a gain of 2.79 dBi at $\text{TOA} = 21^\circ$. Horizontal beamwidth is $2 \times 87^\circ$. For bottom corner feed, it is resonant at 7.24 MHz with a feedpoint impedance of 78 ohms and a gain of 2.6 dBi at $\text{TOA} = 30^\circ$. Horizontal beamwidth is $2 \times 95^\circ$.

This configuration has a very large footprint. The zero dBi point occurs at a TOA of about 11deg. The horizontal radiation pattern covers almost 190deg and the vertical radiation pattern covers almost 160deg, the large footprint that I prefer. This antenna is comparable in performance to a dipole and has a few advantages. 1. Radiation is not straight up at low heights. There is a combination of useful medium and low take-off-angle radiation with a large footprint. It beats a vertical for medium take-off-angles and beats a low dipole for low take-off-angles. 2. Coax is minimized. Bottom corner feedpoint can be close to the shack in a location where a dipole cannot be centered. In this respect, it has the physical advantages of an end-fed and/or base-fed and the radiation advantages of a full-wave loop. Give credit to Kurt Sterba for mentioning this antenna in his Worldradio column, "Aerials". Here's the two configurations that I have tried. X is the feedpoint. 51ft



Page 1

The HF/MF Skylooper For 160 - 40 Meters A variation on the Looper is the Skylooper. This particular variation lends itself to the lower frequency bands, as the radiation angle is intentionally high. Why, do you ask, would one want to shoot a signal straight up into the Ionosphere with it? Well, on the lower bands, say, 160, 80 and 40 Meters, there is an advantage in the high angle radiation. On the upper regions in the HF spectrum, the best results are realized with low angles of radiation, say 15 Degrees above the horizon, or lower. These low angle signals will give you the best range (DX). This is true on the lower bands also, but "real" DX is not necessarily what we would be looking for there. There have been a number of published studies that show that the majority of signals heard on 160 - 40 Meters arrive at an angle above 35 Degrees, and the long range propagation on the bands arrives via multiple hops, with little regard to the low angles characteristically seen on 30 Meters and up. So, it is not really a disadvantage to intentionally transmit at a high angle. So, how do we enhance the higher angles? Well, a large beam, pointed straight up in the air is one possibility. Now, by making an analogy, the ground can act as a reflector, and by "spacing" our driven element about 0.15 to 0.20 wavelengths from our "reflector", we will have a 2 element "beam", and it will be pointed straight up to the Ionosphere! This will enhance the "local" paths, out to 500 miles or so, on these bands. So, with all these desirable features, the next question would be, "How do I build a Skylooper?" As I stated earlier, the height

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, 100% QRP
Tech Specialist (ARRL/WNY), ARRL Life Member,
Trustee, NQ2RP/B 10 Mtr QRP Beacon (4 Watts @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam *** Email - wb2vuo@juno.com
SnailMail - CBA *** Phone - 716.494.1239

"My Night Light runs more power than my Rig!!!"

Date: Thu, 19 Jun 1997 17:09:11 -0700 (MST)
From: Bob Hightower <ki7mn@dancris.com>
To: wb2vuo@juno.com
Cc: qrp-l@Lehigh.EDU
Subject: [21630] Re: Antennas from the BARK PBBS: Loops
Message-ID: <199706200009.RAA20793@dancris.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 07:52 PM 6/19/97 EDT, you wrote:

>WOW! A lot of requests on the files! Bob, KI7MN is posting them on his
>site, and I will send one group of the files per day, this so as to not
>tie up the list too much.

>
>
>

The files are up. Click on the "Homebrew Antennas" button and you'll find
all six pages.

Thanks for providing them.

Date: Thu, 19 Jun 1997 20:11:55 -0400 (EDT)
From: fmathews@norfolk.infi.net (Frank Matthews)
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [21631] Mouse as Paddle?
Message-ID: <v01530501afcf41ed25e2@[208.131.170.249]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Fellow QRPers,

I'm getting ready to build a memory keyer (from a kit) and the

instructions say I need a paddle to program it. The instructions offer a suggestion for using two switches or two straight keys if a paddle is not available. That seems a little awkward (and I only have one straight key)...so...I said why not use a two button mouse?

Has anyone ever done this? Although I'm a "straight key man" this seems like a novel approach. Any suggestions...comments...previous experience? If not I'll let you folks know how it went...or didn't. :-)

TNX and 73, Frank

Frank Matthews
Technology Education Department
Oscar F. Smith High School
Chesapeake, VA 23320
fmathews@norfolk.infi.net
KC4FKX QRP-L #1079 CQC #434 NorCal #2232 AK/QRP #199
Grid Square FM16

Date: Thu, 19 Jun 1997 20:19:53 EDT
From: dwink@juno.com (Daniel C Winkler)
To: rbarmore@indy.net, qrp-l@Lehigh.EDU, glowbugs@www.atl.org
Subject: [21632] Re: Advice on a pi-net
Message-ID: <19970619.172059.7919.0.DWink@juno.com>

Hi Bobbi and gang,

On Tue, 17 Jun 1997 21:58:31 -0500 (EST) "Roberta J. Barmore" wrote:

>...all one has to do is look at the ARRL's "cookbok" pi-net charts
>and scale accordingly. Wrong! Either I can't calculate the
>inductance of a coil, or Bob's pi-net inductor values are high
>by a bit more than 1.5X. Or he went for a different loaded Q
> (ARRL uses 12, which sounds about right).

Calculate your own networks! It's easy. The Handbook has all the formulas. Make a spreadsheet for yourself to calculate the stuff you need frequently. I made up one which calculates pi, L, T, and L-C-C filters. Then you can choose the cut-off frequency, the Q, and try a match for any given component.

I used the background feature to color all my variable cells a

pastel blue, and the important outputs in yellow. I locked all but the variable cells, but I used the null set for my password (I just hit enter when it asked me to enter the password.) That way I don't accidentally write a variable into one of my formulas, but the password is easy to remember, even for me!

On my spreadsheet I also had a place to calculate series impedance of a parallel LC trap at xxx frequency, and a little further down I calculate the inductance of a coil using the standard formula (or the improved formula that appeared in QST a few years back- there's almost no difference!) Yet to be added is a section for calculating the inductance of torroid coils, or the turns needed.... you get the idea.

Make a spreadsheet. Not hard, very useful.

Dan Winkler N7IVR Seattle, WA

Date: Thu, 19 Jun 1997 19:08:32 -0400
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
To: Frank Matthews <fmathews@norfolk.infi.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21633] Re: Mouse as Paddle?
Message-ID: <Pine.3.89.9706191959.D3763-0100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

It's HARD to get used to. The normal side-to-side motion of a set of paddles makes the feel of the mouse very strange indeed.

I imagine it'd be like one of those Kitano Keys - up down, two keys next to each other - but I found the mousekeyer virtually impossible to use. Once I reverted to normal thinking, I couldn't send worth...well...

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 140 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** Hamfest, life's simple joy *

Date: Thu, 19 Jun 1997 20:59:54 -0400 (EDT)
From: DYARNES@aol.com
To: qrp-l@Lehigh.EDU
Subject: [21634] QST Article--Voltage Booster
Message-ID: <970619205740_-792533904@emout13.mail.aol.com>

Any thoughts from the group on the voltage booster article in the July 1997 QST? Seems to me it would be a terrific accessory item for QRP. I think I will give it a go, but would be very interested in any words of wisdom or caveats.

72 de David W7AQK

Date: Thu, 19 Jun 1997 21:48:07 -0400
From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: "qrpforum" <qrp-l@Lehigh.EDU>
Subject: [21635] Ellen's NW20 - Report
Message-ID: <199706200147.VAA26785@mh004.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang,

Ellen has the first four stages of her NW20 built and tested. Each worked the first time we checked it. She's not as motivated to work on it as I would be, so it's going to take her a while. She likes to have me in the shack when she's building so she can ask questions. She's so careful and particular I'm expecting it to be a great rig.

She doesn't really want me reporting her progress. I think she will be embarrassed if she gets in trouble with it. Oh, well, we'll see what happens. A couple of people have mentioned "license" and "code" to her but she's not biting -- yet.

CUL,
Bob Kellogg, AE4IC, Greensboro, NC
Prolably, but not nececelery. -- Benny Hill

Date: Thu, 19 Jun 1997 21:22:15 -0500
From: "Adam B. Kanis" <adam-kanis@uiowa.edu>
To: qrp-l@Lehigh.EDU

Subject: [21636] HP 200CD Audio Oscillator - Free
Message-ID: <2.2.32.19970620022215.00684a48@molisun.ophth.uiowa.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

hi all,

got an HP 200 CD audio oscillator that i picked up at an Illinois hamfest. Doesn't work, and looks like its been modified with pieces missing (power cord, some resitors, and who knows what else). i don't want to deal with it since i picked up 2 oscillators that day, and the other one (?1950's, US Army Signal Corps - made by Reiner Electronics) works fine.

somebody can probably salvage something out of it, it's got a huge 3 section air-variable capacitor, or for spare tubes if they've got the same model. You'll even have the manual which will go with the oscillator.

Free, just reimburse me for shipping (it weighs 22 pounds according to manual).

--adam, n2brt
adam-kanis@uiowa.edu

Date: Thu, 19 Jun 1997 19:38:13 -0700 (PDT)
From: kd7s@psnw.com (Bill Jones)
To: qrp-l@Lehigh.EDU
Subject: [21637] The MFJ-451 Keyboard Saga Continues
Message-ID: <199706200238.TAA03975@sierra.psnw.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Friends,

You may recall that my MFJ-451 Keyboard Keyer died sometime back and I couldn't justify spending more money on it to send it back to the factory for repair. Then Al, K0FRP suggested that I simply reset the microprocessor. I continued to get a busy signal at the MFJ tech support hot-line so I asked the members of this list for help. Joel Malman, WA1QVM came to the rescue. Fifteen minutes after arriving home from work, my '451 was back up and running.

If you have an MFJ-451 keyboard keyer that has stopped working, try shorting pin #2 of the microprocessor to ground after which you apply power. It worked for me.

Thank you Joel and Al.

=====

Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com

=====

Date: Thu, 19 Jun 1997 20:44:06 -0600
From: Jess Gypin <jessqrp@concentric.net>
To: gagnon@gagnon.u-net.com
Cc: qrp-1@Lehigh.EDU
Subject: [21638] Re: Sierra AGC, toroids & SWR query
Message-ID: <33A9EE76.2399@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Larry and Andrea Gagnon wrote:

> adhere the toroids to the board with a glue such as Q-Dope. Can't get that
> here in Wales! Has anyone used plain vanilla silicone seal successssfully?
> Would it affect the Q?
>
> Your comments would be greatly appreciated.....73's Larry MWOAWC

Oh No! Not the dreaded Q dope thread again ARRRRRRGGGGH!!!!!!!!!!!! ; -)

Seriously, you can use silicone, but some types will break down the
electroncis. I just use hot glue from a hot glue gun and it works great!

And now get your delete kyes warmed up for the 80 gazillion messages
that will follow on how to dope coils!

Best
Jess N0TFI

Date: Thu, 19 Jun 1997 21:49:20 -0500
From: TonyDrumm@ibm.net (Tony Drumm)
To: qrp-1@Lehigh.EDU
Subject: [21639] Re: Mouse as Paddle?
Message-ID: <199706200241.CAA12602@out2.ibm.net>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>key)...so...I said why not use a two button mouse?
> Has anyone ever done this? Although I'm a "straight key man" this
>seems like a novel approach. Any suggestions...comments...previous
>experience? If not I'll let you folks know how it went...or didn't. :-)

Frank,

As a matter of fact, I just did this last night! I've previously built a keyer-in-a-mouse using a Curtis keyer. And I have a Tick keyer that I've been thinking of putting into a mouse.

My approach is to first remove all the components. That goes pretty quickly. I hate cutting traces, so I think it's easier this way. Then, there's usually one wire that goes to all the switches. You make that one your ground. Next, I find where other wires go and just jumper traces using the existing holes to get the configuration I want. I did the one last night in about an hour or so. The keyer-in-a-mouse takes a bit longer!

I like the idea of using a mouse in the field instead of my more fragile and expensive paddles.

72.

Tony Drumm
ARS AA0SM - Rochester, MN

Date: Thu, 19 Jun 1997 21:13:28 -0400
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [21640] For sale: MFJ-971 QRP tuner
Message-ID: <Pine.3.89.9706192136.C4141-01000000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

FS: MFJ-971 QRP antenna tuner. Excellent condition, with manual.

300/30w fwd, 60/6w ref power scales, cross-needle meter.

Meter is backlit if desired. Includes balun, will feed coax or random line or twin lead.

Have manual, sells new for \$85, asking \$62.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 140 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** Hamfest, life's simple joy *

Date: Thu, 19 Jun 1997 22:56:10 EDT
From: n4so@juno.com
To: qrp-l@Lehigh.EDU
Subject: [21641] CQ Mag. July 1997
Message-ID: <19970619.225204.5271.2.N4S0@juno.com>

Several QRP related articles are in the latest July issue of CQ mag.
page 26 The QRP MudMod: A Universal Operating Module for QRP Projects

page 62 QRN Squasher Upgrades

page 108 Propagation for July and Aug.

Ken Brown , N4S0
QTH: Nr Mobile, AL
QRP-L #622
n4so@juno.com

Date: Thu, 19 Jun 1997 22:56:11 EDT
From: n4so@juno.com
To: qrp-l@Lehigh.EDU
Subject: [21642] Juno crashes
Message-ID: <19970619.225204.5271.4.N4S0@juno.com>

I believe Juno will crash and issue a General Protection Fault error when
it
tries to read message "Antennas from the BARK PBBS: Loops"
I think you will need to delete this message.
Any similar problems?

Ken Brown , N4S0
QTH: Nr Mobile, AL
QRP-L #622
n4so@juno.com

Date: Thu, 19 Jun 1997 22:08:04 -0400
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>, VHF Mailing list <vhf@w6yx.stanford.edu>, eax@w3eax.umd.edu
Subject: [21643] FS: Some QRP stuff, some other goodies
Message-ID: <Pine.3.89.9706192150.A4517-0100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Time to purge the extra stuff again. Please read all the way thru

UNBUILT Oak Hills model 100 30m QRP rig. 5w out, etc. Just don't use 30m much. \$100 plus ship new, asking \$95 shipped.

M² sqloop antenna. Compact 6m loop, with L-bracket. \$130 new, lightly used, asking for \$100.

Astron RS-12A, excellent cond 9A cont. duty power supply. \$80 new, ask \$55. (no manual, but box)

Astron RS-35A, exc. cond. 25A cont. power supply. \$150 new, ask \$105. (no manual, just a good supply)

MFJ-971 portable tuner. \$85 new, asking \$62. (includes manual)

Bearcat SC-150Y FM scanner. Exc. cond, yellow! \$120. (photocopy of manual, NiCd pack, charger, duckie)

Radio Shack Pro-2039 200 channel tabletop scanner. \$249 new, ask \$175. (box & manual incl)

Radio Shcack HTA-20 30w 2m power amp. 1w in gives 15 out. \$99 new, ask \$65.

Autek QF-1A analog audio filter. Love the one I'm keeping. \$55.

B&W FL-10/1500 lowpass filter, excellent cond. \$25.

Icom 735 with CW filter. Box, looking for manual. Near new. \$650.

Kenwood TM-733A 144/440 MHz mobile, 50/35 watts out. New cond. Box, manual, lighted mic, MFJ duplexer, DFK-3B remote mount kit. Looking for \$425.

Ten-Tec OMNI V / 961 power supp. / 238 roller inductor tuner, all for \$1600, radio and supply are mint.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
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* 301-549-1022 h / 301-982-1015 w *** Hamfest, life's simple joy *

Date: Fri, 20 Jun 1997 05:03:54 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@lehigh.edu
Subject: [21644] SST 40M de K5FO Mod #1
Message-ID: <199706200403.FAA02955@chuck.dallas.sgi.com>

Gang,

A thousand thanks to Bob Follett AB7ST, who after seeing my post sent me email saying he had me beat by several days (he'd been there done that).

For C10 replace the 33pF with a 15pF. Just go ahead and do this before you start out. Go down to R/S and spend the buck.

The mod did several things at once. It moved up the offset to about 700 Hz, increased the receiver sensitivity (now that the offsets matched), and eliminated the feedback problem. All this for about \$0.10 for me since I got one of those R/S disc assortments for \$1.59 or whatever they were at the time.

Thanks Bob. The pizza's on me at Dayton next year or you can come down to Tuthill in July and it's a hotdog.

Now, where is the paddle.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 1997 00:27:02 -0400
From: Bob Hirsch <bobh@p3.net>
To: qrp-l@Lehigh.EDU
Subject: [21645] loop skywires
Message-ID: <3.0.1.32.19970620002702.00710500@p3.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks to everybody who wrote with their loop experiences. This list is getting big; I got a LOT of replies.

For the great majority of those who wrote, the horizontal loop is acting pretty much "by the book". That is, if used above the design frequency, the pattern tended to "flatten out" and the DX performance got better as the frequency went up. Increased height above ground also seemed to help with DX, although to a much lesser degree.

As I said in my original post, I have not been very satisfied with the DX performance of my own horizontal loop, so mileage does, indeed, vary.

Thanks again es 72,

=====
73 de Bob, W3CW
New Hope Pennsylvania
=====
=====
fists #2491
qrp-arc1 #8700
qrp-l #450
=====

Date: Fri, 20 Jun 1997 06:47:31 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@lehigh.edu
Subject: [21646] SST 40M de K5FO on the air
Message-ID: <199706200547.GAA03074@chuck.dallas.sgi.com>

Gang,

You are not a QRPer until you transmit 5W or less on the air and work someone. :-) IMHO.

Well, I don't build these things to sit around on the desk and look nice. No, we are gonna hook them up to power and we are going to radiate.

Move stuff around on the desk (hey, who's got time to clean?) and make room for the 12.33V 1.1Ahr charged gel-cell, the paddles (WBL) and the CMOS III. Hooked up to the tuner and the aerial and the earphones and tune around. Some signals. Oh, 7.041 is clear. CQ CQ CQ DE K5FO K5FO K5FO/QRP K a slight pause K5FO K5FO DE AA0.. AA0.. K The call masked to protect the innocent. OK, rack up MO his 599 my 449.

OK, try again. K5FO DE AA8.. in MI

One more time K5FO DE WB0... in KS

It works and Bob Follett saved me a bundle of work. That is in my opinion what this group is all about. 5 years ago everyone of us had to work twice as long to get the same results. Some will argue that was good, we learned more. I have to argue that we now have more time to move on to more projects and get on the air more. I hear more QRPer's on the air now than ever before. Look at the press we are getting. Look at the numbers in clubs. Look at the QST results. Look for FD results from this year. There will be a lot of QRPer's on. Be there --- be square. :-) And we certainly have more kits to chose from. Like going into the Cafeteria or any other buffet. Take all you want but eat what you take. No take home..... :-)

Someone else said that C10 was 15pF on 30M rig and 33pF on 20M. I don't know. Wayne Burdick will have to make the call on that one. I'd say 15pF for sure on 30M and I'd have to put my money on 15pF on 20M. Haven't been there and from the luck Doug and I had on the 20M I'd say 15pF as his was 33pF I'm sure.

3 Q's in 30 minutes each with one series of CQ's. Not bad for a new rig. OK for now. QRN was bad and I did move off of 7.040 due to digital station pouncing on freq.

That's it from BigD. Off of 40M until October. At least that is the plan. Hey you guys are really racking up the WIMPS

scores.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Thu, 19 Jun 1997 22:52:27 -0800

From: svecbrdk@well.com (L.Svec,W.Burdick)

To: qrp-l@lehigh.edu

Subject: [21647] E-mail request: to my home address only, please (N6KR)

Message-ID: <199706200551.WAA27046@smtp.well.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

I continue to regularly get Ham-related mail at work, so once again I'd like to ask that all correspondence be directed to:

svecbrdk@well.com

It isn't that I don't like getting such mail at work. It's just that it's too much fun to get off the treadmill and answer it!

Thanks for the bandwidth,

Wayne

N6KR

Date: Thu, 19 Jun 1997 23:24:03 -0700

From: Bill Todd <bill@techline.com>

To: nwq-l@scn.org

Cc: qrp-l@Lehigh.EDU

Subject: [21648] NW QRP Club FD Plans

Message-ID: <1.5.4.32.19970620062403.006bd018@mail.techline.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hello NWQ-L and QRP-L groups -

Just a note to remind all QRPers in Wa and Northwest Oregon that the NorthWest QRP Club will be operating Field Day from Bush Pioneer Park in Bay Center.

All QRPers are welcome to join us!

Call to be used: WF7M
operating 2A

Including:
2 CW HF stations,
a Novice/Tech station,
6 meter FM/SSB,
2 meter simplex,
Packet, and
a Satellite station

If you would like to join us, please drop me a note and I will send you directions on how to get here.

Be sure to join us for the Oyster stew feed on Saturday evening. We'll be monitoring 146.58 simplex to help you if you can't find Bay Center.

BCNU, Bill-N7MFB
CUL - Bill-N7MFB
<http://www.techline.com/~bill>

Date: Fri, 20 Jun 1997 03:03:36 -0400 (EDT)
From: Bob Patten <n4bp@shadow.net>
To: QRP-L Reflector <qrp-l@Lehigh.EDU>
Subject: [21649] ZF8 DXpedition Announcement
Message-ID: <Pine.SOL.3.91.970620030117.27537B-100000@hyper>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

FOR IMMEDIATE RELEASE June 15, 1997

DXPEDITION TO ZF8 - LITTLE CAYMAN ISLAND

NA-016, CQ-08, ITU-11, Grid-EK99

A group of South Florida DXers will operate
from Little Cayman Island.
Dates: July 10, 1997 to July 15, 1997.
The Main event: IARU HF World Championship contest.

The operators are:

David Novoa,	ZF2DN/ZF8	QSL via KP4AM
Bob Patten,	ZF2DE/ZF8	QSL via N4BP
Bruce Phegley,	ZF2PU/ZF8	QSL via W40VU
Julio Ripoll,	ZF2JS/ZF8	QSL via WD4JNS

Planned operating bands & modes:
160 meters to 6 meters, CW, Phone, RTTY, QRP.

Contact: Julio Ripoll, WD4JNS
Tel: (305) 387-2119
Fax: (305) 386-6921
Email: wd4jns@icanect.net

#####

--
Julio Ripoll, Architect, WD4JNS
EMAIL: wd4jns@icanect.net
Home Page: <http://www.icanect.net/~wd4jns>

Forwarded by:

Bob Patten, N4BP	Plantation, FL
n4bp@shadow.net	http://www.shadow.net/~n4bp/n4bp.htm
Brass Pounder BBS (954) 472-7715	

Date: Fri, 20 Jun 1997 06:49:21 -0400
From: Dana Michael <damichael@amp.com>
To: qrp-1@lehigh.edu
Subject: [21650] FOR SALE: OMNI-A, BC-560XLT SCANNER
Message-ID: <199706201052.GAA27542@nss2.CC.Lehigh.EDU>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

FOR SALE:

Ten-TEC OMNI-A includes Astatic hand mic and original manual. Very good condition. \$285

BC-560XLT Bearcat 16 programmable channel scanner. With wall cube P.S., antenna and manual. Good condition. \$90

Interested?

Call 1-717-810-2891 from 6:30 AM till 3:30 PM EDT or 1-717-896-3973 from 5:00PM till 10:00PM EDT or e-mail.

Thanks es 73, D. A. MIKE Michael W3TS

Date: Fri, 20 Jun 1997 05:57:01 -0700 (PDT)
From: kd7s@psnw.com (Bill Jones)
To: qrp-1@Lehigh.EDU
Subject: [21651] Re: Mouse as Paddle?
Message-ID: <199706201257.FAA05851@sierra.psnw.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Friends,

Frank Matthews, KC4FKX, asked about using a converted computer mouse as paddles for a homebrew keyer. I have been using converted computer mice for years. They are simple to make, cheap (usually free) and very reliable. Some people reported having difficulty making the transition from a side-to-side motion to up-and-down. Yes, it is different, but it shouldn't take more than a few minutes to get the feel of it. Look at page 12 of QST, July, 1994, for a photograph of one of my "MouseKey" paddles.

=====
Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com
=====

Date: Fri, 20 Jun 1997 09:23:46 -0400 (EDT)
From: fmathews@norfolk.infi.net (Frank Matthews)
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [21652] Make A Contact!
Message-ID: <v01530500afc73fa6fb@[208.131.169.87]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Fellow QRPers,

I (KC4FKX) will be operating QRP portable from the Eastern Shore of Virginia (Cheriton, VA) during our camping vacation (week) starting Saturday. I'll be working 40M beginning 9PM (EDT) every night on 7.105 MHz es 7.118 Mhz alternate. My neighbor (KS4DO) will also be on vacation during the same time but on the Outer Banks of North Carolina. We plan to make an initial contact each night at 9pm (EDT) then "work the world"!

I'll be using a newly constructed SLV along with a Scout 555 (yes...it goes down to 5 watts and less) for this little expedition. I also plan to have some special QSL cards made up for this event as well. Fire up the rigs this week and try working one of us! Look forward to hearing from some of you here on the list.

73, Frank

P.S. Although it isn't open often, we're going to try 10M (don't laugh!) at 12:30 PM (EDT) each day on 28.345 MHz and 28.340 MHz alternate. Wish us luck... :-)

Frank Matthews
Technology Education Department
Oscar F. Smith High School
Chesapeake, VA 23320
fmathews@norfolk.infi.net
KC4FKX QRP-L #1079 CQC #434 NorCal #2232 AK/QRP #199
Grid Square FM16

Date: Fri, 20 Jun 1997 07:57:47 -0400

From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [21653] NF3I/7 @ Ft. Tuthill!
Message-ID: <Pine.3.89.9706200726.C5516-0100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well, I bit the bullet and did it - bought my ticket to Phoenix for July 24th, coming back to MD on August 2. My wife has to work, and told me that if I didn't go, I'd never forgive myself, and that she WANTED me to go (hmmm, she seemed AWFULLY eager :)

Besides, my sister lives in Flagstaff, and wanted me to visit, AND it's her birthday (she's KC7QLZ, my brother-in-law is KC7QME).

I figger that if I find a couple of good deals, the \$225 travel costs will be pretty much worth it! :) This will thus be the most costly hamfest experience I will have ever been involved in (even Dayton was never this much, but then again, it's only 500 miles from here).

Anyway, Joe G., AB7TT, has kindly volunteered to pick me up and take me to Flagstaff late Thursday.

I's VERY much looking forward to goofing around in the hot Arizona sun for a few days! It's been a LONG time since I had a real vacation.

Beyond this, if anyone wants me to lug any East-coast stuff out for them, well, let me know...

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 140 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** Hamfest, life's simple joy *

Date: Fri, 20 Jun 97 09:31:54 EDT
From: "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>
To: qrp-l@Lehigh.EDU
Cc: pilant@seesaw.ENET.dec.com
Subject: [21654] KD1JV Spectrum Analyzer 'Scope Adapter (SA/SA) for sale
Message-ID: <9706201331.AA06762@us2rmc.zko.dec.com>

Since I just recently acquired an HP spectrum analyzer, I offering this piece for US\$50.00 + shipping (from 03052; New Hampshire).

73

Greetings,

Date: Fri, 20 Jun 1997 07:17:49 -0700 (PDT)
From: Monte Stark <ku7y@sage.dri.edu>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21656] NorCal 40, the original....
Message-ID: <Pine.SUN.3.90.970620071340.9832A-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Just a little note about a weakness of the original
NorCal 40 kit.....this is the one with only the MAV108 and
you gotta get all the rest of the parts yourself.....

Last weekend, while burning weeds, I also burned some empty
boxes.....and I can report that the MAV108 and the board to
mount it on are not fire proof!!

Looks like the clam shell case can be reused.....shame as I
was saving this kit for history!! :-(

I've been trying to explain to the XYL why cleaning a shack is
not a good thing to do.....

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Fri, 20 Jun 1997 08:55:04 -0700
From: James Griffith <GriffithJ@ricks.edu>
To: qrp-l@Lehigh.EDU
Subject: [21657] Thanks to all who answered Envriotronics VS Vibrokey, got
Message-ID: <s3aa4668.002@ricks.edu>

both.

Finished my trade and was able to get both keys. Thanks to all for the
info.

DE Jim, WA7NDD

Date: Fri, 20 Jun 97 10:25 CDT
From: Dennis Zeares K3ETS <wzeares@post.cis.smu.edu>
To: qrp-l@lehigh.edu
Subject: [21660] Spelling error in post---HOW PICKY!!!@!!
Message-ID: <1.5.4.16.19970620091012.29cf214e@post.smu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

OK people. I am dying of cancer. I mis-spelled Aston RS-20A.

If you have nothing better to do than find fault with my spelling
then you need to see a doctor.

Please leave me alone.

Thank You, Dennis K3ETS

Date: Fri, 20 Jun 1997 08:27:14 -0700 (PDT)
From: "Allan G. Taylor" <ataylor@midas.llnl.gov>
To: qrp-l@Lehigh.EDU
Subject: [21661] FS: Emtech NW40 : is sold
Message-ID: <199706201527.IAA26576@midas.llnl.gov>

The NW40 (Emtech) that I posted for sale recently is committed. It goes to
K0EVZ the day after field day.

Look for K7GT/p from Pleasanton Ridge. East Bay section.

Grant K7GT

Date: Fri, 20 Jun 1997 11:27:20 -0400
From: Ed Tanton <n4xy@bellsouth.net>
To: boatanchors@theporch.com
Cc: QRP-L Reflector <qrp-l@lehigh.edu>
Subject: [21662] HP8640B Sig Gen Opportunity
Message-ID: <3.0.1.32.19970620112720.00a59120@mail.atl.bellsouth.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Do NOT email me. I'm not part of this in any way. Allen is WB4GNT, his email is: <mgs@avana.net> and his tel is (770) 973-6251.

72/73

Date: Fri, 20 Jun 1997 08:27:51 -0700 (MST)
From: "Mark E. Monninger" <markem@primenet.com>

To: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21663] Re: NF3I/7 @ Ft. Tuthill!
Message-ID: <Pine.BSI.3.95.970620081921.13171A-100000@usr02.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 20 Jun 1997, Scott Rosenfeld NF3I wrote:

> ...
> I's VERY much looking forward to goofing around in the hot Arizona sun for a
> few days! It's been a LONG time since I had a real vacation.
> ...

I sure hope there's no hot Arizona sun in Flagstaff. We Phoenix-area people go up there to get OUT of the hot Arizona sun and into the cool pines. Of course, it's all relative so the 85 or so temps in Flag that seem cool compared to the hundred-and-teens temps from Phx may not qualify as cool to some. :-)

Be prepared for the late afternoon thunderstorm that's pretty much a Tuthill fixture, altho it stayed away last year.

Anyway, I'm looking forward to Tuthill, as usual. Looks like there will be quite a group from qrp-1 in attendance. Hope to see you all there.

73... Mark AA7TA

Date: Fri, 20 Jun 1997 08:26:23 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>
To: tentec@contesting.com
Cc: qrp-1@lehigh.edu
Subject: [21664] Argo 515 selectivity improvement
Message-ID: <11197.866820383@safety.ics.uci.edu>

I had mentioned to the group (a while back) that I wanted to put the 8 pole crystal filter into the 515, and when I did, I still noticed a form of blowby on the opposite of center. I had eliminated the problem by inserting an old 4 pole filter (from my old Corsair I when I replaced that filter with the 8 pole option) and it worked fine. I got to thinking that I could just put the 4 pole filter back in and stick the spare 4 pole filter

in line afterwards, that equals 8 poles :-). It works just great. So, if you have a spare TenTec 4 pole filter lying around and you want to tighten up your Argo 505, 509, 515, it is very easy, just involves some mini coax and careful wiring. Loss is very little.

One more note, the carrier oscillators need to be moved for the 8 pole filter, and I had to move them back for the 4 pole filter. I had gotten that RadShack freq counter on sale last week and found a use for it right away! The resolution is not enough to get exact 750 Hz offset for CW, but I don't mind 50 Hz away from that one.

Makes my 515 a lot like the Triton IV, pretty nice receiver, none of the old chatter that the standard 4 pole filter used to let through.

Clark
WA3JPG

P.S. If any interest, I don't mind posting the wiring details, though they are in some old QST's and QQ's if you have them.

Date: Fri, 20 Jun 1997 11:44 -0400 (EDT)
From: Ronald_A_Pfeiffer@ccmail.ed.ray.com
To: qrp-l@Lehigh.EDU
Subject: [21665] FS: SIERRA KIT
Message-ID: <01IKAMALXJTU001DET@ZEUS.ED.RAY.COM>
MIME-version: 1.0
Content-transfer-encoding: 7BIT

I bought SIERRA kit. But I am new to building so I decided to build something else first... Built 38Special and it doesn't work!! Although I will keep trying on the 38S, I am not going to attempt the SIERRA; therefore:

SIERRA with three band modules(40,20,10)	
Buzznot	
KC2	for sale as one
KC2 front pannel	

\$411 invested and am asking \$375 includes shipping in CUS.

Date: Fri, 20 Jun 1997 17:14:14 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@lehigh.edu
Subject: [21666] Headsup SS 97 Note
Message-ID: <199706201614.RAA04317@chuck.dallas.sgi.com>

Gang,

I just got the latest QRZ DX bulletin and here is some news that is not good. This is serious business and I hope that those of you in the know will let us know if this means what I think it means. I knew this was coming for some months and now it is official.

ARRL has officially added a section NL to the already 78, thus making 79 sections for SS97. NL being Newfoundland-Labrador, so just go ahead and add it to CT and the other programs for logging.

But that is not the bad news. The bad news is that the Radio Amateurs of Canada (RAC) are thinking of adding some more sections!! I got email from VY1JA and he was very concerned. Some of the new proposed sections do not have active hams and certainly some have no testers in them.

The bad news in all this is that there is the likely chance that it may become physically impossible for anyone in the contest to get a cleansweep, i.e. work all 79 sections. And it's not like someone can pack up a small station for the weekend and setup in another section and seriously believe that they can help a large number of stations make the cleansweep. Sure, they'll be number 1 but most likely will not have high Q-counts in the 800+ range.

Jay, VY1JA, has to get on every SS. If not, there wouldn't be any cleansweeps. That is real dedication.

I know that most of the members of this group are not testers, that's fine. But there are a growing number of guys and girls getting into SS for just a little bit to get all 50 states at QRP levels. During this test you have every section in the USofA on at one time and one weekend and it's like shooting fish in a rain barrel (I use this metaphorically). You have the world's best operators with the best antennas and best rigs on all at once. Beats the heck out of taking most of year or multiple years to do it. And most of us consider it fun anyway.

I'm not on the contest reflector, so I'm sure the topic will come up hot and heavy over there too. Don't know that we can do anything to influence the decision, but it may be worth looking into. IMHO. Email me direct if you care. I am not stupid, I know this in the realm of bigger politics,

but sometimes the little voices might be heard.

Wouldn't you know it? I get close to the cleansweep and they move the finish line. :-) :-) For the humor impaired. Next thing you know we'll have 51 states!! Have enough finding all that we have now. ; -) :-)

FYI

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 1997 12:17:33 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@lehigh.edu>
Subject: [21667] SST 30M de N3XRV (Q's and Observations - LONG)
Message-ID: <Pine.LNX.3.93.970620110701.900H-1000000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well, after all the waiting and wondering, the SST showed up, and as fate would have it, I had no "free" time for an entire week. It just sat there "calling" me, now I know how junkies must feel.

Yesterday I unexpectedly got the morning off and jumped right into the kit. All went as expected, with a few notes and changes that I'll try to summarize here.

Vital Statistics:

Freq Range	10.109-10.119 (w/MV209)
Power TX	2W @ 13.8v 309mA
	1W @ 13.8v 180mA
	1.5W @ 12v 277mA
	1W @ 12v 188mA
RX Current	24mA @ 13.8v
	23mA @ 12v

Test equipment was a DMM, RS Freq Counter, and DX70T RX. I'll try the MVAM108 later and report on the range. The big surprise was RFC5 in the PA circuit, it spec's 10 turns on the core for 15uH. At 10T I measured 42uH, so I started unwinding. Maybe it's me, or possible a different mix in the core, but I got all the way down to 6 turns to get about 15.1uH. This was measured with the AADE LC-II meter. It read the 12uH pre-wounds OK so it was at least close. The same thing, to a lesser degree, happened

with L1-3 for the output filter and Xmit mixer. There, I just removed one turn from each of the toroids and the LC-II gave me a smile. They were close to spec's.

With the rig completed, I ran to the antenna and hooked it up for the "alignment". I hesitate to call it that, since you only have to tweak two caps to get it going. Now I have two "peaks" on C1, (is that right?) and C28 seems a little touchy, but it came up the first time with no problems.

As I tuned around a bit, *THE* very first signal I heard was "RIG HR IS A 38S AT 5 WATTS. AM USING FISHING <qsb> D TO SUPPORT MY WIRE ANTENNA, SO HW CPY ?ARRY DE KM<qrn>SG". With apologies to Disney, it's a small world after all :) So if the call, or the message looks familiar to anyone, drop me a line.

Now for the problems. The received audio seems a little weak, I don't get "hiss" in the headphones (tried many) until the volume is at about 80%. This isn't a real problem until you hit key down, then the sidetone volume will just about deafen you. Tried to make a few QSO's by calling CQ with the volume down and then turning it back up, but it never really worked out. So I'm wondering if the turns count on the coils is correct, but the value is wrong? I might rewind the toroids with the "proper" number of turns and see if the audio picks up a bit. With the volume set at 50% the sidetone is perfect, good tone, sane volume, narry a chirp :)

My other theory was the the input filter, or IF filter were too tight. I measured all the caps as I put them in, so they are fairly well matched in all the filter circuits. Since I can't the bandpass on them I chose to "short" across the filters and see what happened. Shorting the IF filter (RFC6 to RFC7) broadened the bandpass but didn't do much for the audio level, this could have been due to impedance mismatch. Likewise shorting RF filter (ANT to C22) made things noisier, but didn't pick up the audio at all. So next I'll try replacing D1 since I have them and it was a bit confusing to install even after checking it with a meter. It had "cathode stripes" on both ends. The bottom line is, I can hear VERY strong stations with the volume at 50% (and the sidetone is OK) but don't hear *anything* else with the volume that low.

Busy weekend is planned, YL is tired of NOT having a kitchen (tore it out to remodel last weekend) but will put some time in on the air when I can. Now this isn't a sked <wink> or anything but I'll be somewhere between 10.109 and .119 Sat and Sun afternoon. And Chuck, C10 on the 30M unit is 15pF, sounds like 700hz to me.

72

-- Chris Cartwright,	Technical Engineer	ccart@vidtel.com	--
-- N3XRV	QRP WAS 15/9 (w/c)	ccart@erols.com	--

-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=02 30M=02 17M=00 12M=00 STATES=02/00/00 DX=00/00/00 QSL's=00 --

Date: Fri, 20 Jun 1997 16:44:59 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: boatanchors@theporch.com, glowbugs@www.atl.org, qrp-l@Lehigh.EDU
Subject: [21668] "Graph" maker???
Message-ID: <19970620164456.AAA19532@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Does anyone know of a computer program that will take a set of graphical ordinates (such as frequency in Mhz., and dial readings in a range of 0-100) and construct and plot the graph on the screen? It would be nice to have something that will do your plotting and curve drawing, while you determine graph size and type (linear, semi-log, log). This complete with drawing the grid or just with "ticks on the box surrounding the plot!

I guess such a thing exists that isn't part of a \$999.95 "CAD" program?

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
Butternut HF2V antenna, G-R test gear.....

Date: Fri, 20 Jun 1997 11:46 CDT
From: FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \ (608\) 267-3135)
To: qrp-l@Lehigh.EDU
Subject: [21669] VFO Drift (i.e. Centennial 75m)
Message-ID: <009B60F81437DE95.4A9C@dnr.state.wi.us>

Hi. I haven't seen much posted on the Centennial 75m SSB rig of late and want to inquire if anyone has come up w/ any mods.

I am especially interested to know if anyone has come up with changes to reduce the amount of drift from the Varactor VFO (or of any general solutions that people have used with other Varactor VFO's). Although the drift is not a lot when on SSB, I am told it is much more substantial when trying to use the rig for CW. I am hoping to try the rig on CW by inserting a sidetone signal to create the CW signal but it may not be worth it if I can't cut down on the drift. I will probably use a RS or W9GR DSP to give me a smaller bandwidth for receiving the CW signals. I am using the Centennial 75m with AADE's frequency display.

Tnx and 73 (es 72) de N9WR, Don C. Faith III

Date: Fri, 20 Jun 1997 10:25:58 cdt
From: w8lrm@juno.com (Albert K. Rea)
To: qrp-1@lehigh.edu
Subject: [21670] RX-10. PM-2 Manuals Recieved.
Message-ID: <19970620.120226.6999.0.w8lrm@juno.com>

Thanks to all who replied to my request for manuals. I now have both thanks to two fine gentlemen from the list. Keep up the good work and good QRP'ing.

72/73.....de.....

Al W8LRM
St Joseph, Michigan
on Michigans Sunset Coast

Date: Fri, 20 Jun 1997 13:10:07 -0400
From: Ed Pacyna <pacyna@auratek.com>
To: qrp-1@Lehigh.EDU
Subject: [21671] OHR100/30 For Sale or Trade
Message-ID: <3.0.16.19970620131006.3637f9f6@galaxy.auratek.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

30M OHR100, new condition for sale or trade on best offer basis.

Date: Fri, 20 Jun 1997 10:22:06 -0700
From: Roger Hightower <n7kt@dancris.com>
To: adams@chuck.dallas.sgi.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21672] Re: Headsup SS 97 Note
Message-ID: <33AABC3E.6F1E@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bad news! I'm sure the RAC is like the ARRL, and creates Sections for political reasons having nothing to do with contesting. Just look at the proliferation of sections in California. Granted, it may be easier for Section Managers to handle a smaller geographic area, but if that's true, why doesn't Texas have a bunch more?

For contest purposes there should be no more than one "Section" multiplier per state, and certainly not any section where there are no hams.

Got within one of a clean sweep a few years ago, but I guess that's "the good old days" now.

--

72/73 de Roger N7KT n7kt@dancris.com Mesa, AZ Grid DM43cj
NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383
AK-QRP 167

Date: Fri, 20 Jun 1997 18:24:49 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: ccart@dns.vidtel.com
Cc: qrp-l@lehigh.edu
Subject: [21673] Re: SST 30M de N3XRV (Q's and Observations - LONG)
Message-ID: <199706201724.SAA04477@chuck.dallas.sgi.com>

Chris et.al.,

Thanks for the posting on the SST 30M. I didn't consider it long or lengthy posting, but then I had a special interest in the post. :-)

I did some quick and dirty calculations for the group:

24mA receive @ 13.8V is 0.33W
23mA receive @ 12.0V is 0.28W

2W out @ 13.8V x 309mA is 4.26W - 0.33W = 3.93W or about 50.9% efficiency
1W out @ 13.8V x 180mA is 2.48W - 0.33W = 2.15W or about 46.5% efficiency
1.5W out@12.0V x 277mA is 3.32W - 0.28W = 3.04W or about 49.3% efficiency
1.0W out@12.0V x 188mA is 2.25W - 0.28W = 1.97W or about 50.6% efficiency

And the delta W at 13.8V gives $(2 - 1) / ((.309 - .180) * 13.8)$ or 56.2% efficiency
And the delta W at 12.0V gives $(1.5 - 1.0) / ((.277 - .188) * 12.0)$ or 46.8% efficiency

These calculations do not account for the LED power with the AGC action during transmit etc. It's just a ballpark value and I don't want to get down to the microwatt level on energy management. I think the 12V vs. 13.8V efficiency values are to be expected.

Best I could do on power out with 12.33V on 40M was 1.1W, so you may be on to something with using the AADE LC-II meter before installing toroids. You are going to cost me some more money, I can tell. :-) ;-) I had been carrying a brochure around from one of the vendors with that particular item on it. So many toys and so little time.....

I have to do some quick painting on the trim of the house Saturday morning so Saturday afternoon is fine. ^h^h^h^h^h^h Hope to catch you on sometime. :-) ;-) Good thing there are no movies coming out that got good ratings.

So here is what I would expect with a 12.3V 1.1Ahr Gel-Cell in the field. Assuming a 30% duty cycle for on the air activity at 1.5W out at 12V.

Rounding all numbers up, assume 50mA drain continuous average we are talking 22 hours or better which is good for a couple of days or more backpacking. This comes up at a good time in the discussion as in a few weeks I will be on Santa Catalina Island just west of San Diego. Someone who knows all the IOTA numbers can tell me the number and is it worth the effort for me to get on the air? With my luck it is probably so common that noone needs it QRP or not. Not that I need an excuse to carry a new rig.

FYI and hope this helps the accumulation of quick data on the SST
I am shooting, since it is lunch time here in TX, for a 30 minute timeline to get the pictures of the SST on the homepage without comments.
I still have one bad link that I have been reminded of but it can wait.

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 1997 10:39:37 -0700 (PDT)
From: Stan Skelton <sskelton@c1n.etc.bc.ca>
To: qrp maillist <qrp-l@lehigh.edu>
Subject: [21674] "Rainbow" tuner on 80 ????
Message-ID: <Pine.SUN.3.95.970620103805.11414A-100000@c1n>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OK, it's no cause for shame, someone out there must have modified a
Rainbow tuner for 80 meters! Let's hear how it was done, please?

Stan, QRP-L #34, OHR Sprite 80, 38 Spec.

\ \ / | _ _ | | _ _ / / _ | | | / | _ _ _ |
 \ \ / | _ _ | | / / \ _ \ | | \ \ | |
 \ \ / | _ _ | | / / \ _ \ | | \ \ | |

Date: Fri, 20 Jun 1997 18:46:49 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [21675] No Joy on the webpage today
Message-ID: <199706201746.SAA04555@chuck.dallas.sgi.com>

Gang,

Sorry about that, but no DAT tape in the pile of stuff
I brought to work. I hate it when that happens. OK,
pictures on Monday.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/>
WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 1997 10:45:38 -0700
From: Stan <stan@cruzio.com>
To: n7kt@dancris.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21676] Re: Headsup SS 97 Note
Message-ID: <33AAC1C2.190@cruzio.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Roger Hightower wrote:

>
> Bad news! I'm sure the RAC is like the ARRL, and creates Sections for
> political reasons having nothing to do with contesting. Just look at
> the proliferation of sections in California. Granted, it may be easier
> for Section Managers to handle a smaller geographic area, but if that's
> true, why doesn't Texas have a bunch more?

Uhh , cuz cows don't vote ?

Stan N6XU

Date: Fri, 20 Jun 1997 14:04:22 -0400 (EDT)
From: SNickrand@aol.com
To: qrp-l@lehigh.edu
Subject: [21677] CAD program for panel design?
Message-ID: <970620140418_-859319361@emout14.mail.aol.com>

I'm looking to step up the quality of my homebrew enclosures and am looking for a simple to use, free or cheap, CAD program. Ideally, the program would allow one to designate the size of the panel, knobs, meters etc., then allow you to move them around on the panel to give the best arrangement. Any suggestions?

Bill Nickrand KB9KOL

Date: Fri, 20 Jun 1997 13:19:20 CDT
From: "Taylor Greg" <gtaylor@TAEX003N.tamu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [21678] Re: Headsup SS 97 Note

> political reasons having nothing to do with contesting. Just look at
> the proliferation of sections in California. Granted, it may be easier
> for Section Managers to handle a smaller geographic area, but if that's
> true, why doesn't Texas have a bunch more?

72, Greg W5KJ (from very common STX)

Dr. Gregory S. Taylor !MAIL: SpSvcs 216
Extension Program Leader for ! College Station, TX 77843-2125
Community Development !VOICE: 409-862-8561
Texas Agricultural Extension Service!FAX: 409-847-8744
Texas A&M University System !EMAIL: Reply or g-taylor4@tamu.edu

Date: Fri, 20 Jun 1997 11:22:21 -0700
From: Ed Loranger <we6w@qsl.net>
To: mgipe@reliablemeters.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [21679] 50/40/30 CA Results/Story
Message-ID: <33AACA5D.6DE4@qsl.net>
Mime-Version: 1.0
Content-Type: multipart/mixed; boundary="-----6C943C4E84C"

This is a multi-part message in MIME format.

```
-----6C943C4E84C
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Here's my log and a little operational history.
-Ed L.

--
72/73 de we6w grp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.

QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

-----6C943C4E84C
Content-Type: text/plain; charset=us-ascii; name="results_504030"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="results_504030"

N/T Band (7112 +/-)
SETUP:HW-8, 2W, 33 ft. Vert.

RESULTS:

Station	Time	Sent	Rcvd	State	Pwr	Name
AB7TK	0012	559	449	ID	2	RANDY
KJ7ZU	0058	239	559	WA	2	ROY
AB7MY	0153	559	569	AZ	5	GARY

Gen/Adv/Ex BAND (7042 +/-)
SETUP:OHR-100 at 5W for first contact. Then went
3.5 watts Battery thereafter.

RESULTS:

Station	Time	Sent	Rcvd	State	Pwr	Name
AB7MY	0207	569	569	AZ	5	GARY
WB6EGE	0236	579	549	CA	190	WILLIE
AB7TK	0310	449	449	ID	3	RANDY
K7JW	0322	599	549	UT	70	KEN
W5VTS	0349	599	459	NE	---	RICHARD

BEHIND THE SCENES:

Went out to get the paper last week and my neighbor asked
"What's with all the antennas?" I was a little worried,
since this is the same neighbor that sent the elec. company
to MY house to change a noisy gas pressure regulator --
without my knowledge. Told him about QRP and Field day and
portable antennas -- emphasized low power and how it won't
affect his phones (Another conversational scare).

Caught him at about 0205Z standing in his yard listening
to me send, (turned down the sidetone), while he monitored
his television and had his portable phone to his ear!
All is ok, and I got a chuckle out of his antics.

Struggled from 0058 - 0122Z with KJ7ZU from Kennewick, WA.
Had some strong QRM Voice over his 239/229 signal. Finally got
his name and City. Willie from Penngrove,CA was at a ham

meeting and his casual 18WPM turned to shaky 25 wpm after I told him about the 50/40/30 contest. Guess he feared I was in a hurry to go. Oh well, it was nice working a local guy for a short one.

The band QSB was deep cycling, I worked w/o break for the full 2 hours hoping to catch someone at a peak opportunity. Got pretty lonely out there as I heard stations +/- 2 KCS from me calling CQ and no-one answering me. Randy did mention he heard no calls for me, we6w.

Would like to thank Randy and Gary for giving me some much needed qso activity. Thanks Guys!

Wish richard could've stayed around, seemed in a hurry to run off. I think he was QRO since he neglected to answer my third request for "what is ur pwr ?"

Well, I had a great time! Could go another 4 hour shift and maybe try again for those who need it.

Remember, it's not how long your log is, it's how you use it!

72 to all!

-Ed Loranger, QTH Santa Rosa, CA

-----6C943C4E84C--

Date: Fri, 20 Jun 1997 11:27:36 -0700
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [21680] Re: 50/40/30 CA Results/Story
Message-ID: <33AACB98.60DB@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

<<The band QSB was deep cycling, I worked w/o break for the full
<<2 hours hoping to catch someone at a peak opportunity.
THAT should be 4 Hours!!!

-Ed L.

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8;OHR-100, Pixie2, Johnson Viking II w/VF0.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Fri, 20 Jun 1997 13:32:19 CDT
From: "Taylor Greg" <gtaylor@taex003n.tamu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>,
gtaylor@taex003n.tamu.edu
Subject: [21681] Re: Headsup SS 97 Note
Message-ID: <8A4E3A32393@taex003n.tamu.edu>

> political reasons having nothing to do with contesting. Just look at
> the proliferation of sections in California. Granted, it may be easier
> for Section Managers to handle a smaller geographic area, but if that's
> true, why doesn't Texas have a bunch more?

Isn't it more likely based on population density (of hams in this case) rather than geographic area. Of course, speaking of Texas I'm

Following up to my own post now that I've read the beginning of the thread (I've either got to change the date ordering of messages or restrain my fingers from the keyboard)....you would think it would have something to do with density (and geography) but sure sounds like there something awry here somewhere.....I'm guess I'm kind of used to having some sections being extremely rare but several!!!! Kind of reminds me of some of the efforts that go into defining new countries.

Greg W5KJ

Dr. Gregory S. Taylor !MAIL: SpSvcs 216
Extension Program Leader for ! College Station, TX 77843-2125
Community Development !VOICE: 409-862-8561
Texas Agricultural Extension Service!FAX: 409-847-8744
Texas A&M University System !EMAIL: Reply or g-taylor4@tamu.edu

Date: Fri, 20 Jun 1997 11:38:42 -0700 (PDT)
From: Monte Stark <ku7y@sage.dri.edu>
To: Roger Hightower <n7kt@dancris.com>
Cc: Low Power Amateur Radio Discussion <grp-l@lehigh.edu>

Subject: [21682] Re: Headsup SS 97 Note
Message-ID: <Pine.SUN.3.90.970620113234.10809A-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Roger,

Well, I don't think I agree.....

If there were only one section per state, everyone would come away with a sweep.

I have never had a sweep. When I finally do get one, be it at 79 or 179, I know the fun will drop!

And I don't care if anyone lives there. Just that it is someplace that can be operated from.

A sweep should be something hard to do. Someone should watch the results and when something like 10% of the entries get a sweep, then add more sections! Lets keep it hard to get so that it is really worth having when you do get it!

After all, what fun is "winning" a section award if you were about the only one in your class?? Kinda the same thing with a "easy" sweep.

OK, soap box up..... :-)

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Fri, 20 Jun 1997 14:54:28 +0100
From: "Robert L. Willsey" <w4nul@cowboy.brightok.net>
To: qrp-l@Lehigh.EDU
Subject: [21683] Keyer
Message-ID: <33AA8B94.4890@mail.brightok.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I read some time ago here about a paddle for morse that is only one paddle. I am trying to get back into CW after many years away. I got a Bencher iambic paddle and am really having a terrible time trying to adjust to it. I used to use a straight key (most of the time) and a friends side-swiper bug. I really didn't have any trouble with the bug. Could anyone tell me about the single paddle keyer that I could use with my FT-920. I would also appreciate getting the address and/or the e-mail way to contact this person.

Thanks in advance.

73 de Bob w4nul@brightok.net

Date: Fri, 20 Jun 1997 12:17:31 -0700
From: Roger Hightower <n7kt@dancris.com>
To: Monte Stark <ku7y@sage.dri.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21684] Re: Headsup SS 97 Note
Message-ID: <33AAD74B.6EB9@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

As long as there is a VY Section it'll never be easy, :-)

Lately I've had trouble with San Diego, too.....must be inside the umbrella for that one.

--

72/73 de Roger N7KT n7kt@dancris.com Mesa, AZ Grid DM43cj
NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383
AK-QRP 167

Date: Fri, 20 Jun 1997 13:23:42 -0600 (CST)
From: Pete Hardie <hardie@duke.usask.ca>
To: qrp mailing list <qrp-l@lehigh.edu>
Subject: [21685] Re: Headsup SS 97 Note
Message-ID: <Pine.0SF.3.95.970620130542.12255B-100000@duke.usask.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> Roger Hightower wrote:

>
> Bad news! I'm sure the RAC is like the ARRL, and creates Sections for
> political reasons having nothing to do with contesting.

The sections don't exist for a contest. The sections came first and then the contest followed. As new sections are created the contest will just have to keep following - or change its rules.

> > For contest purposes there should be no more than one "Section"
> > multiplier per state,

If this logic is applied to Canadian provinces, what now remains of the Maritimes section would be split into Prince Edward Island, New Brunswick and Nova Scotia - and Newfoundland/Labrador would be a separate section anyway.

Have fun.
Pete
ve5va.qrp@usask.ca

Date: Fri, 20 Jun 1997 11:36:51 -0800
From: "Jim (AL7FS) and Nancy (KL7NY) Larsen" <larsennnc@alaska.net>
To: qrp-l@Lehigh.EDU
Subject: [21686] SS Sections
Message-ID: <33AADB3.2B99@alaska.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am not much of a tester but, gosh, Alaska is so big it covers the same as from Atlanta, to South Texas, to Duluth, MN, to San Diego. It covers four time zones by the sun.

So.....how many sections should we have up here, I wonder? What do you think, Chuck? 5, 6, 10? :-) (Just kidding.)

Guess what? I am not even sure how many there are? Is it one? Section #001? Seems I remember something like that.

73,
Jim

Alaska. Where propagation makes one mad. :-P""

--

Jim Larsen
Vision VR40
Acupressure Anchorage
AL7FS ex-WA0LPK / KL7
Anchorage, Alaska

Date: Fri, 20 Jun 1997 11:51:49 -0800
From: "Jim (AL7FS) and Nancy (KL7NY) Larsen" <larsennnc@alaska.net>
To: qrp-1@Lehigh.EDU
Cc: k6sti@n2.net
Subject: [21687] DSP Blaster
Message-ID: <33AADF55.519A@alaska.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My friend KL7X, Mike, is using a DSP Blaster for 2 meter EME. He seems impressed. I found some info on the Web at

<http://seti1.setileague.org/software/dspblast.htm>

A short clip of the 1st two paragraphs says:

"DSP Blaster(TM)
by Brian Beezley, K6STI, k6sti@n2.net

K6STI's new \$100 DSP Blaster(TM) provides DSP filtering without DSP hardware. DSP Blaster is software that uses your PC and a 16-bit Creative Labs sound card to replace DSP boxes costing hundreds of dollars.

DSP Blaster provides high- and low-pass SSB filters, CW/DATA bandpass filters, CW peaking filters, adaptive noise reduction, automatic notch filtering, and automatic gain control. The DSP filters provide sharp cutoffs and low stopbands to eliminate adjacent-frequency QRM. Adaptive LMS noise reduction minimizes background hiss, power-line noise, and audio distortion to make listening much more pleasant."

=====

Does anyone have any experience with this on HF? (Especially on 30-40-80-160 mtr) How did it work for you? Any other alternatives of equal or better value and performance?

It turns out, this used 100 MHz Pentium I bought last year came with the Sound Blaster 16 card already in it. DSP Blaster is based on the SB16.

Comments? And thank you.

73,
Jim

--

Jim Larsen
Vision VR40
Acupressure Anchorage
AL7FS ex-WA0LPK / KL7
2 meter WAS #36
Anchorage, Alaska

Date: Fri, 20 Jun 1997 21:07:34 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [21688] Section counts for SS97
Message-ID: <199706202007.VAA05085@chuck.dallas.sgi.com>

Gang,

Got back email from Canada saying that there is probable that only one more division may occur and that for a heavily populated area of Canada. So that there will not be a significant impact as first thought or as many added sections as would result in the scenario outlined in the previous post.

So, I hearby apologize if I brought up the topic prematurely. People are giving me feedback, now that I put myself out on the limb so to speak. As we get closer to SS97 we can start worrying about the cleansweep and all the strategies that requires.

Again, thanks to the Canadians that were kind enough to query the parties involved for the information and their forwarding that information to me. It is greatly appreciated. Forwarding of this message also would be greatly appreciated.

Looks like the division of sections is being based on population both by the RAC and the ARRL.

TX got divided up and we got WTX due to the growth of the population in that part of the state. People found out that I had moved east so

that it was safe to move in. :-) ;-) I knew the family should have held onto the house for another 30 years.

All is well that ends well.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 1997 13:08:02 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: Sandy W5TVW <ebjr@worldnet.att.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21689] Re: "Graph" maker???
Message-ID: <Pine.BSI.3.95.970620130717.14842A-1000000@usr01.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 20 Jun 1997, Sandy W5TVW wrote:

> Does anyone know of a computer program that will take a set of
> graphical ordinates (such as frequency in Mhz., and dial readings
> in a range of 0-100) and construct and plot the graph on the screen?
> It would be nice to have something that will do your plotting and
> curve drawing, while you determine graph size and type (linear, semi-log, log).
> This complete with drawing the grid or just with "ticks on the box
> surrounding the plot!
> I guess such a thing exists that isn't part of a \$999.95 "CAD"
> program?
>

Sounds like an application for EXCEL, which is part of MS OFFICE.

I gotta go.

Regards,

Chris

```

/-----\
/ If you understand it, \      Circuit Design for the
/ then it's obsolete!   /      RF Impaired
\-----'
_ |/

```

Chris Trask / N7ZWY
Principal Engineer
ATG Design Services
P.O. Box 25240
Tempe, Arizona 85285-5240

Graphics by Loek Frederiks

On Fri, 20 Jun 1997, Jim (AL7FS) and Nancy (KL7NY) Larsen wrote:

Yep, only one Alaska section. ARRL divides states into sections by population to balance the number of hams that each representative represents. Florida is a good example of how this works. Years ago, we had East Florida and West Florida, but this was changed to North FL and South FL some time ago to better balance the population areas.

Personally, for contest purposes, the more sections the better (as long as there is at least one ham in each). I like to watch my score build as the mults are logged. WPX is a great contest as far as watching the score grow. Last year I entered single band on 10M with a score of around 20K. This year, I entered single band on 15M. For the first few hundred Q's, almost every Q is also a mult and I watched my score grow to over 25 times last year's score. For one who competes with only himself, this was exciting.

Jim, Still waiting for my still point inducer, this outfit in WPB takes their time. One more bad headache since your visit here...

73,

Bob Patten, N4BP
n4bp@shadow.net

Plantation, FL
<http://www.shadow.net/~n4bp/n4bp.htm>

Brass Pounder BBS (954) 472-7715

Date: Fri, 20 Jun 1997 16:41:06 -0400
From: Barry Keating <Barry.P.Keating.1@nd.edu>
To: qrp-1@Lehigh.EDU
Subject: [21691] PV80NU ??
Message-ID: <v03007801afd053d44b3a@[129.74.251.115]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

PV80NU was working stations like crazy on Thursday night (at about 0100z on 1.0216 MHz) and he took time to catch a few QRP stations (including myself). He was quite interested in the power output here and the rig.

Does anyone have any QSL information on PV80NU? I have tried the usual sources with no luck.

Barry Keating
WD4MSM

Date: Fri, 20 Jun 1997 21:42:05 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@lehigh.edu
Subject: [21692] New Canadian Sections
Message-ID: <199706202042.VAA05188@chuck.dallas.sgi.com>

This is a note from the VP of RAC:

To: cq-contest@contesting.com
Cc: rdl2@igs.net, adams@sgi.com
Subject: New Canadian Sections
Mime-Version: 1.0
Content-Type: text/plain
Content-Disposition: inline

As most of you know the new RAC Newfoundland & Labrador section(NL) will become a new multiplier for SS 97. The new section has been active within the Field Organization system since May 1996 and after a one year grace period, RAC asked ARRL to recognize NL as a new multiplier. This request was in response to a number of V01 amateurs who asked RAC to have the section recognized as a multiplier in ARRL contests.

Several amateurs(VEs and US) have expressed concern that this new section will be difficult to work and in particular may impede one's ability to obtain a clean sweep in SS. There is no doubt NL will be one of the more difficult sections to work, but in response I would point out the most difficult section to work(NWT/YT-which is not a "section" but that is another story) has less than 200 amateurs with one active contester(VY1JA) while NL has in excess of 1000 amateurs with 3 or 4 stations active in contests(V01NA, V01MP etc).

I have also been quoted as saying RAC is considering adding more sections. That is true, but there are no immediate plans to do so and I doubt anything will change in the next two or three years. When you consider the Canadian sections have not changed since 1949 and given the huge increase in growth in the number of amateurs, I do not think increasing the number of VE sections will materially change the difficulty in obtaining a "sweep". If RAC adds any sections in the next few years I would think they would be in BC(VE7), Ontario(VE3) and Quebec(VE2)-all fairly easy provinces to work.

Tim VE6SH
RAC VP

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=037 30m=32 17m=5 12m=0 States=22/05/00 DX=03/00/00 QSLs=014

Date: Fri, 20 Jun 97 14:09:00 PDT
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
To: qrp-1@lehigh.edu
Subject: [21693] Dipole VS Phased Verticals

I was asked to add two 1/4 wavelength phased verticals to my comparison at <http://people.delphi.com/CecilMoore/dipvsver.htm>

So I did and the phased verticals beat the dipole at take-off-angles of less than 16 degrees. The monopoles were spaced 1/2 wavelength apart and phased at zero degrees, a trivial task.

A half-square is much like upside-down phased verticals and probably easier to construct.

73, Cecil, W6RCA, OOTC

Date: Fri, 20 Jun 1997 21:31:49 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: qrp-1@Lehigh.EDU
Subject: [21694] "Plotting" programs...
Message-ID: <19970620213137.AAD2800@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

To All:

Many thanks for the plethora of suggestions! I don't have ANY spreadsheet available. I WILL check out the other stuff and I have an old version of MathCAD.

I may look at that, although it is a pain to use it for anything!

This is a great bunch of groups to get suggestions from!

(Now if I can get my SX-71 with oscillating RF stage/Mixer tamed, I'll be in hog heaven....or is it Boat anchor heaven?)

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
Butternut HF2V antenna, G-R test gear.....*

Date: Fri, 20 Jun 1997 16:33:17 -0400 (EDT)
From: Richard Mulvey <mulveyr@frontiernet.net>
To: stan@cruzio.com
Cc: qrp-l@Lehigh.EDU
Subject: [21695] Re: Headsup SS 97 Note
Message-ID: <199706202033.QAA44444@node6.frontiernet.net>
Content-Type: text

>
> Roger Hightower wrote:
> >
> > Bad news! I'm sure the RAC is like the ARRL, and creates Sections for
> > political reasons having nothing to do with contesting. Just look at
> > the proliferation of sections in California. Granted, it may be easier
> > for Section Managers to handle a smaller geographic area, but if that's
> > true, why doesn't Texas have a bunch more?
>
>
> Uhh , cuz cows don't vote ?
>

You've apparently never lived in Chicago. ;-)

- Rich

Date: Fri, 20 Jun 1997 15:52:18 -0700
From: David Adams <adamsclan@netgate.net>
To: qrp-l@Lehigh.EDU
Subject: [21696] France DXpedition all ready to go!
Message-ID: <33AB09A2.63A1@netgate.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Okay...it's not a dxpedition per se, but when I arrived home today and opened the mail I found my shiny new licence de radioamateur! So, between July 12-26 listen for f/n9uxu (which is strange as last year it was issued to f5/n9uxu).

Since I was able to work nobody from the list last year, I am actually bringing an HF rig rather than building one of the bag of parts kits upon arrival.

Since being stuck on one band stinks, I'll be bringing along my hw8 as well as my 10m mizuho (for what it is worth!). Another lister has graciously offered to lend me his ldq qrp tuner, so that coupled with my 752 power station should keep me going for a while.

Does anyone know what the 440 situation is in France? My little alinco does tone burst and I thought I would bring it, but I can't find reference to any french repeater systems above 2m. I'll be bringing a laptop for the digital camera so maybe packet?

I should have planned ahead and purchased a sierra (much smaller than the 8), but my radio pennies went for a ts-440 this year and I doubt Bob wants to "support" my little dxpedition!

Ah, this will be a great trip, if you are in Lyon, stop by the company (SySTEMix) and we can do lunch...

73 de dave, n9uxu

Date: Fri, 20 Jun 1997 15:50:07 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [21697] Re: Headsup SS 97 Note
Message-ID: <199706202250.PAA03605@usr03.primenet.com>

Stan (N6XU) wrote:

> > Granted, it may be easier for Section Managers to handle a smaller
> > geographic area, but if that's true, why doesn't Texas have a bunch more?
>
> Uhh , cuz cows don't vote ?

No, but their lobbyists sure do. Just ask Oprah. :)

Hope to hear all of you out there on Field Day! Even if you can't make it to the field, try to put some RF out there. Think of it as good practice for the QRP field events. :)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It was the monkeys! The monkeys did it!"

Date: Fri, 20 Jun 1997 18:55:02 EDT
From: wb2vuo@juno.com (William K Hibbert)
To: qrp-l@lehigh.edu
Subject: [21698] BARK Files causing Juno Crash?
Message-ID: <19970620.185315.2063.2.wb2vuo@juno.com>

Have any other Juno users experienced the General Protection Faults that Ken, N4SO experienced when reading my posts???

I can break the files into smaller groups if I am getting too close to the 60K limit.

I can't think of anything else that might cause a problem. Any ideas out there?

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, 100% QRP
Tech Specialist (ARRL/WNY), ARRL Life Member,
Trustee, NQ2RP/B 10 Mtr QRP Beacon (4 Watts @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam *** Email - wb2vuo@juno.com
SnailMail - CBA *** Phone - 716.494.1239

"My Night Light runs more power than my Rig!!!"

Date: Fri, 20 Jun 1997 18:55:03 EDT
From: wb2vuo@juno.com (William K Hibbert)
To: qrp-l@lehigh.edu
Subject: [21699] Antenna Files from the BARK PBBS: G5RV's
Message-ID: <19970620.185315.2063.3.wb2vuo@juno.com>

From: wb2vuo
Full-Name: William K Hibbert
Date: Wed, 18 Jun 1997 16:08:19
Subject: Antenna files at BARK PBBS, Part 4

The G5RV and ideas on 1/2 and 2x models...Keith,
WB2VUO-----
<g5rv_1.txt>-----

Page 1

THE G5RV ANTENNA

The G5RV is a very popular antenna on the HF amateur band today. Despite its widespread use on the bands, there are some myths and misconceptions concerning the G5RV that seem to have a life of their own. Working with text from the ARRL "Antenna Compendium", Volume 1, I would like to shed some light on this versatile antenna. First, from Louis Varney, G5RV, of West Sussex, UK, here is some back-ground and insights into the G5RV.

"The G5RV antenna, with its special feeder arrangement, is a multiband center-fed antenna capable of efficient operation on all HF bands from 3.5 to 28 MHz. Its dimensions are specifically designed so it can be installed in areas of limited space, but which can accommodate a reasonably straight run of 102 ft for the flat-top."

Louis further states that, "In contradistinction to multiband antennas in general, the full-sized G5RV antenna was NOT designed as a half-wave dipole on the lowest frequency of operation, but as a 3/2-wave center-fed long-wire antenna on 14 MHz, where the 34 ft open-wire matching section functions as a 1:1 impedance transformer. This enables the 75-ohm twin-lead, or 50/80-ohm coaxial cable feeder, to see a close impedance match on that band with a consequently low SWR on the feeder. However, on all the other HF bands, the function of this section is to act as a "make-up" section to accommodate that part of the standing wave (current and voltage components) which, on certain operating frequencies, cannot be completely accommodated on the flat-top (or inverted-V) radiating portion. The design center frequency of the full-size version is 14.150 MHz, and the dimension of 102 ft is derived from the formula for long-wire antennas which is:"

$$\text{LENGTH (ft)} = \frac{492(n - .05)}{f(\text{MHz})} = \frac{(492 \times 2.95)}{14.15} =$$

102.57 ft (31.27 m) where n = the number of half wavelengths of the wire (flat-top)

"Because the whole system will be brought to resonance by the use of a matching network in practice, the antenna is cut to 102 ft."

As the antenna does not make use of traps or ferrite beads, the dipole portion becomes progressively longer in electrical length with increasing frequency. This effect confers certain advantages over a trap or ferrite-bead loaded dipole because, with increasing electrical length, the major lobes of the vertical component of the polar diagram tend to be lowered as the operating frequency is increased. Thus, from 14 MHz up, most of the energy radiated in the vertical plane is at angles suitable for working DX. Furthermore, the polar diagram changes

with increasing frequency from atypical half-wave dipole pattern at 3.5 MHz and a two half-wave in-phase pattern at 7 and 10 MHz to that of a long-wire pattern at 14, 18, 21, 24 and 28 MHz. Although the impedance match for 75-ohm twin-lead or 80-ohm coaxial cable at the base of the matching section is good on 14 MHz, and even the use of 50-ohm coaxial cable results in only about a 1.8:1 SWR on this band, the use of a suitable matching network is necessary on all the other HF bands. This is because the antenna plus the matching section will present a REACTIVE load to the feeder on those bands.

Page 2 Thus, the use of the correct type of matching network is essential in order to ensure the maximum transfer of power to the antenna from a typical transceiver having a 50-ohm coaxial (unbalanced) output. This means unbalanced input to balanced output if twin-lead feed is used, or unbalanced to unbalanced if coaxial feeder is used. A matching network is also employed to satisfy the stringent load conditions demanded by such modern equipment that has an automatic level control system. The system senses the SWR condition present at the solid state transmitter output stage to protect it from damage, which could be caused by a reactive load having an SWR of more than 2:1." In Part 2, I will discuss the theoretical operation of the G5RV antenna band-by-band... Keith, KE2DI END OF PART

1.-----

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<g5rv_2.txt>-----

Page 1

THE G5RV ANTENNA

PART 2)

THEORY OF OPERATION

----- The general theory of operation follows. As I can't put the diagrams in the file, I will paraphrase the text from the ARRL "Antenna Compendium", Volume 1, which is a great book for the antenna fan (NOT A COMMERCIAL, JUST AN OBSERVATION..[WKH]). Please keep in mind that this is the THEORETICAL information, and the actual operation will depend on placement, height above ground, metal siding, power lines, trees, UFO flight patterns, Etc. 3.5 MHz: On this band, the antenna acts as a shortened half-wave flat-top, with about 17 ft of the total length made up by the matching section. The remainder of the matching section introduces an unavoidable reactance to the antenna between the feedpoint and the feedline. The antenna pattern is effectively the same as a half-wave dipole on this band. 7 MHz: The flat-top, plus 16 ft of the matching section makes up a partially folded up 2 half waves in phase, (collinear) antenna. The antenna pattern is somewhat sharper than a dipole because of its collinear characteristics. The match is somewhat degraded due to the unavoidable reactance introduced by the extra length in the matching section. This reactance can be easily tuned out with an antenna tuning unit (ATU). 10 MHz: On this band, the antenna functions as a 2 half-wave collinear. It is very effective, but the reactance presented at the feedpoint requires a good ATU. The pattern is basically identical

to the 7 MHz pattern. 14 MHZ: This band is where the G5RV really shines. The antenna is operating as a $3/2$ wave long, center-fed antenna with a multi-lobed, low angle pattern of about 14 degrees elevation, which is very effective for working DX on this, the most popular DX band. The antenna presents a 90-ohm load with basically no reactance present. Even the use of a 50-ohm coaxial feed will present a SWR of only about 1.8:1, easily tuned out with an ATU. 18 MHz: The antenna performs as 2 full-waves in phase, combining a lower angle with the broadside gain of a collinear array. The load is high-Z, with somewhat low reactance. 21 MHz: On this band, the antenna works as a $5/2$ -wave, center-fed longwire. This produces a multi-lobed, low angle radiator, with a high-Z resistive load. When matched with the ATU, it makes a highly effective antenna for DX contacts. 24 MHz: The antenna again functions effectively as a $5/2$ -wave long wire, but due to the shift in the position of the current loops on the array, the load is resistive, approximating the load on 14 MHz. Again, the pattern is multi-lobed, with a low radiation angle. 28 MHz: On this band, the antenna acts as a 3-wave, center-fed long wire. The pattern is similar to 21 or 24 MHz, but with additional gain due to the collinear effect obtained by feeding two $3/2$ -wave antennas in phase. The load is high-Z, with low reactance. In Part 3, I will discuss the construction of the G5RV... Keith, KE2DI
END OF PART 2.

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Page 1

THE G5RV ANTENNA

PART 3)

CONSTRUCTION TIPS

THE FLAT-TOP: The dimensions of the G5RV flat-top are specified in Part 1. The antenna does not need to be put up as a flat-top array, but can be installed as an inverted-V. The center of the antenna should be as high as possible, of course, and the matching section should descend at a right angle to the array. It is recommended that the smallest wire gauge used for the flat-top be #14, although wire as small as #18 could be used. If the antenna is raised as an inverted-V, the included angle at the apex should not be less than 120 degrees. THE MATCHING SECTION: It is recommended that the matching section be constructed of open-wire feeder for minimum loss, as it always carries a standing wave on it. Due to the standing wave on it, the actual impedance is unimportant. A satisfactory construction technique for the open wire line matching section would be to make your own spreaders out of scrap lucite, or similar plastic of low dielectric loss. The plastic strips would be cut about 2 inches long, $3/8$ inch to $1/2$ inch wide, and be notched on the ends to fit #14 wire. The spreaders would be drilled about $1/2$ inch in from each end for the binding (tie) wires, and the spacers would be spaced 12 inches center-to-center. The next most-desirable matching section would be made from window-type open wire line, either 300-ohm, or 450-ohm.

This is basically a ribbon line, like heavy duty TV-type twin lead, with #16 to #20 wire, and "windows" cut in the insulation every 4 to 6 inches. The advantage of the "window" line is that the conductors won't short together if the line twists in a high wind. Lastly, and the least desirable, (although it will work), is "TV-type" twin lead. The main disadvantage of the TV-type twin lead is durability. The conductors on the twin lead are usually #22 to #28 gauge, and the plastic used for the insulation deteriorates faster in the sun and/or rain. The advantage of it is that it is readily available at electronics outlets, or even most department/home improvement stores. The quality is proportional to price, if a choice is available. Do not use the "shielded" twin lead. The shield will degrade the matching section, especially on 3.5 or 7 MHz.

MATCHING SECTION LENGTH: The length of the matching section is an ELECTRICAL half-wave on 14 MHz. The actual physical length is determined by the following formula: $L = (492 \times VF) / f \text{ (MHz)}$, where VF is the velocity factor of the matching section. The velocity factor is determined by the type of line, and the dielectric properties of its insulation. For the three types of line discussed so far, the VF is:
Open wire - .97 "Window" line - .90 "TV" twin lead - .82

Page 2

By substituting the VF in the formula, and calculating for a center frequency of 14.15 MHz, you come up with the following matching section lengths: Open wire - 34 ft "Window line - 30.6 ft "TV" twin lead - 28 ft This matching section is connected to the center of the array, and allowed to descend vertically at least 20 ft or more, if possible. It can then be bent and tied off to a suitable post or line, and connected to the coaxial line, which is run to the shack, and the ATU. **THE FEEDER:** In the original article describing the G5RV antenna, published in the "RSGB BULLETIN" for November 1966, it was suggested that, if a coaxial feed was used, a balun might be employed to provide the necessary balanced-to-unbalanced transformation at the base of the matching section. However, later experiments, and a better understanding of the theory of operation of the balun indicated that such a device was unsuitable due to the high reactance in the load presented at the base of the matching section. In a nutshell, DON'T USE A BALUN ON THE G5RV !!!!! If a balun is connected to a 2:1, or higher SWR, its internal losses increase. The result is core heating and/or saturation. If saturated, the core can actually distort the RF wave, generating harmonics, and in extreme cases, with QRO, the core and balun can burn up (literally). An unbalanced-to-unbalanced ATU can accommodate the variable load, and cancel out the reactance present. It will also tend to reduce any harmonic energy present, which will, due to the multi-band nature of the G5RV, tend to be radiated. In general, the automatic ATU's in modern rigs will load the G5RV on all but the 10 MHz band. END OF PART 3.

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Page 1

THE G5RV ANTENNA

PART 4)

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FEED SYSTEM:-----
 Doug DeMaw, W1FB, in his "W1FB'S ANTENNA NOTEBOOK", states that the G5RV can be fed directly with open wire to the ATU. If this is done, the antenna will load on all bands with no problems. In this case, the ATU needs to have a balanced output to accommodate the balanced line. This would lend itself to the portable operator, who could use "TV"-type twin lead, and a small tuner designed for balanced feed on all the HF bands. This would be an elegant solution for a campsite or cottage, reducing the bulk of the gear to be carried. A convenient length of twin lead, allowing for the VF, would be 72 ft. The whole antenna would coil up into a small bucket, or even a backpack with #18 wire. In closing, if you need a good, multi-band, and unobtrusive antenna for your station, give the G5RV a try. Best of luck, and have fun! 73, Keith, KE2DI

SOURCES: ARRL "ANTENNA COMPENDIUM", VOLUME 1 ARRL "W1FB'S ANTENNA NOTEBOOK" ARRL "W1FB'S NOVICE ANTENNA NOTEBOOK" TAB PUBLICATIONS "73 WIRE AND DIPOLE ANTENNA" EDITORS AND ENGINEERS "RADIO HANDBOOK" END OF PART 4

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Using the 160 - 10 Meter G5RV As a Vee-Beam The 160 - 6 Meter G5RV, which is a Double-Scaled G5RV, (G5RV)x2, can be used with improved performance in the upper end of the HF spectrum by configuring it as a Vee-Beam. Electrically, the (G5RV)x2 is a 3/2-wave dipole for the 40 Meter band, or .75-wave/side. By bringing the ends in towards each other, you can form it into a Vee-Beam, which will show sharper Bi-Directional characteristics, and gain in the direction through the bisector. To utilize a Vee-Beam through a wide range of the HF spectrum, one should design the antenna for the middle of the range desired. Typically, if the desired band(s) one wants to improve are the 20 - 10 Meter bands, then the apex angle is calculated for the 15 Meter band. Using this logic, the leg-length is then 2.25-wave, which requires an included angle of around 70-degrees. Using a 70-degree angle would result in an antenna, held up with 3 supports, forming an equilateral triangle, (NOT a Right Triangle!), with legs of 102', 102' and 167'. It is a wide, but shallow triangle, with an apex "height" of 58.5'. The directivity is along the plane of the apex "height", and is bi-directional. The approximate, (VERY approximate!), gain of such an array is shown below in tabulated form for the upper HF bands:

APP'X GAIN		FREQUENCY	LENGTH(waves)
7.0 MHz	0.75-wave	1.5 dBd	
10.1 MHz	1.1-wave	2.5 dBd	14.0 MHz
1.5-wave	4.5 dBd	18.1 MHz	1.8-wave
5.3 dBd	21.0 MHz	2.25-wave	6.0 dBd
24.9 MHz	2.6-wave	6.5 dBd	28.0 MHz
3.0-wave	7.0 dBd		

These "gain" figures are optimistic, and based on the apex-angle being correct for the given leg length, which is not the case here. The gain will be closest to the

listed figure on the 15 Meter band, and off the most on the 40 Meter band, but should be within a dB or so. These figures are close to the gain of a small tri-bander, and the beamwidth is such that one could cover most of the USA from the North East with one installation. Get the most out of your wire, and try it out on Field Day! Weat the BARK Field Day group, (KB2UFY), will be looking for YOU! 73, Keith, KE2DI, F.D. Chairman, Brockport Amateur Radio Klub, KB2UFY, 2A/WNY, (or maybe 3A/WNY)-----

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Page 1

SOME IDEAS ON THE G5RV

----- The G5RV multiband antenna is a very popular design on the HF bands. The "common" G5RV is configured as a 3/2-wave dipole on 20 meters, and works as either a shortened dipole, or a collinear-fed long wire on the other bands. In this configuration, the overall length is 102 ft, with a 28 to 34 ft matching line. In some cases, this is still too large to fit in one's yard, and not everyone can convince their neighbors to allow one to stretch the wire across property lines. In this case, a 1/2-size version, covering 7 to 28 MHz is useable. Conversely, some amateurs would like to have 1.8 MHz capability, and have the 204 ft length necessary for this array. I have dimensions included here for both the half-size, and double-size G5RV antennas.

Bands	1.8-28 MHz	3.5-28 MHz
7.0-28 MHz		

Flat-top	204 ft	102 ft	51 ft
	Matching lines	Open wire	67.3 ft
34 ft	17 ft	Ladder line	62.4 ft
31.5 ft	21.2 ft	"TV" twin lead	56.9 ft
28.5 ft	14.4 ft		

[All of the above-mentioned antennas will work on the 6 Meter band, sometimes without an ATU.] Of the listed antennas above, the 7-28 MHz version was referred to in Louis, G5RV's article in the ARRL "ANTENNA COMPENDIUM" Volume 1, the 1.8 - 28 MHz version is in use at Evhan, WB2ELB's QTH, (with a single feedline, directly matched with the internal ATU in his Kenwood, and the 3.5-28 MHz version in use by more local hams than I can remember right now. Just for reference, the "window"-type ladder line is available at most amateur dealers, over-the-counter, or mail-order, and the polycarbonate (Lucite) plastic for the spreaders for home-built open wire is available at any major plastic supplier at scrap prices here in Rochester. If you have any questions on the G5RV, parts, reference books, Etc, drop me a line, KE2DI @ BARK, or call on the phone, (716)494-1239...73, Keith, KE2DI

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End of QRP-L Digest 763
